# Compuprint PageMaster 280 User Guide
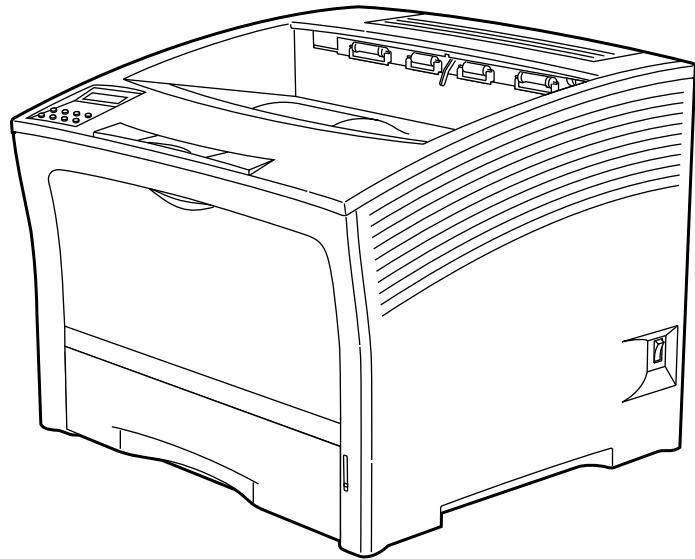
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You can access the Compuprint server via any one of the many world-wide web browsers available to Internet users. The Compuprint home page is http://www.compuprint.net.

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Preface

In this Chapter . . .

Welcome

Thank you for selecting the Compuprint PageMaster 280 laser printer. This User Guide contains important information about the operation and care of your printer. Please read this manual in its entirety and keep it at hand for later reference.

About this Manual

Scope

This User Guide contains all of the information necessary to operate and care for your printer and accessories. It is intended to be used with the pictorial unpacking instructions and the Installation Guide, both included in the printer packaging. If you have not already unpacked and installed the printer, please refer to these documents. This guide does not contain instructions for unpacking and installing the printer.

Overview

This manual contains ten chapters and one appendix:

Preface

The Preface contains information about this guide and about the features and aavailable configurations of the printer.

Chapter 1: Getting Started

This chapter reviews the contents of the printer packaging, explains the parts of the printer, and describes the space and environment requirements of the printer.

Chapter 2: Using the Printer

This chapter provides information concerning the daily use of the printer, including procedures for connecting the printer and loading print media, and guidelines for selecting print media.

Chapter 3: Understanding and Navigating the Control Panel

This chapter explains the control panel and its functions, and also demonstrates how to navigate throughout the various menus and submenus that allow you to view and change the printer settings.

Chapter 4: Maintaining the Printer

This chapter provides information about maintaining your printer. Although the printer requires very little maintenance, with normal daily use you will need to perform some routine maintenance procedures, including replacing consumable items and cleaning the printer. This chapter also contains information about moving and storing the printer.

Chapter 5: Troubleshooting

This chapter describes the problems that you may encounter when using your printer, and provides procedures for resolving the problems. This chapter also lists the warning and error messages that appear on the control panel display.

Chapter 6: Using the Duplexer

This chapter provides all of the information necessary to install, use, and maintain the duplexer.

Chapter 7: Using the 500-Sheet Feeder

This chapter provides all of the information necessary to install, use, and maintain the 500-sheet paper feeder option, including procedures for cleaning the feeder and removing paper jams.

Chapter 8: Using the High Capacity Feeder

This chapter provides all of the information necessary to install, use, and maintain the high capacity feeder, including procedures for cleaning the feeder and removing paper jams.

Chapter 9: Using the Offset Output Tray

This chapter provides all of the information necessary to install, use, and maintain the offset output tray, including procedures for cleaning and removing paper jams.

Appendix A: Safety Notes and Regulatory Compliances]

This appendix describes cautions to take when installing, transporting, or operating the printer, and also includes the applicable regulatory compliances.

Printer Orientation

Throughout this guide, the four sides of the printer are referred to as front, rear, right, and left. The front of the printer is the side near the control panel, and the rear of the printer is opposite the front. The left and right sides of the printer are defined as the sides to the left and right, respectively, of a person who is facing the front of the printer.

Conventions

This following conventions are used throughout this manual to emphasize certain procedures or information:

NOTE: A note is a tip or extra information that may be helpful in installing or using the printer.

 CAUTION: A caution message provides information that may help you avoid equipment damage, process failure, or inconvenience. Read all caution messages carefully. Compuprint will not be responsible for damage that results from improper use of the printer.

 WARNING! A warning message indicates the possibility of personal injury if a specific procedure is not performed exactly as described in the guide. Pay close attention to these sections and read them fully to prevent possible injury. Compuprint will not be responsible for damage that results from improper use of the printer.

About the Printer

The Compuprint PageMaster 280 laserprinter uses a data modulated laser beam and conventional dry-ink xerographic processes to produce images up to 1200dpi resolution at a paper output speed of 28 pages per minute. The printer can accommodate both plain paper and other print media, and feeds paper from either a main 500-sheet paper tray or from the front tray, which is designed to feed special print media such as labels and transparencies.

There are four paper handling options available for the printer, including a Duplexer for two-sided printing, a 500-Sheet Feeder for additional paper capacity or variety, a High Capacity Feeder for even greater paper feeding options, and an Offset Output Tray to hold and separate large print jobs. There are also four replaceable components: the Toner Cartridge, the Fuser, the Transfer Roller, and the High Capacity Feeder Feed Rolls.

You may connect the printer to either a local computer or a computer network system. Application and print driver software on the computer controls image generation and print processing. The computer sends the electronic image to the printer, where the printer turns the electronic image into a black and white printed image.

Features

Your laser printer has the following features:

- Quality printing at a high speed

    The printer has an output of 28 pages per minute with a resolution up to 1200 dpi.

- Flexible use of paper sources and delivery methods

    The base configuration of the printer includes one 500-sheet universal paper feeder and a front tray. You may also add the following options to the printer: additional 500-sheet Feeders, 2000-sheet High Capacity Feeder, Offset Output Tray, and Duplexer.

- Easy operation

    The easy-to-read control panel display clearly shows the status of printer operation. Control panel pushbuttons allow you to access and view printer menus, submenus, and status messages.

- Single-element toner cartridge

    The integrated toner cartridge contains both the toner and the photosensitive drum in a single housing, making replacement easy and convenient.

- Continuous printing of up to 3150 sheets

    The printer can print up to 1000 sheets unattended when the offset output tray is installed, and can print up to 3150 sheets attended when the high capacity feeder and one 500-sheet paper feeder are installed.

- Optional network-readiness

    The network configuration of the printer includes an Ethernet Network Interface Card.

Available Configurations

The PageMaster 280 is available in the following configurations:

Standard Configuration - PageMaster 280

- Memory: 16MB
- Resolutions: 300 x 300 dpi, 600 x 600 dpi, and 1200 x 1200 dpi
- Paper Input: One 500-sheet A4/letter paper tray and one 150-sheet front tray for paper, transparencies, envelopes, and other non-standard print media
- Paper Output: One 500-sheet face-down tray
- Interfaces: IEEE 1284 Parallel and USB
- Printer Languages: PCL5e, Adobe Postscript 3

Network Configuration - PageMaster 280N

- Memory: 16MB
- Resolutions: 300 x 300 dpi, 600 x 600 dpi, and 1200 x 1200 dpi
- Paper Input: One 500-sheet A4/letter paper tray and one 150-sheet front tray for paper, transparencies, envelopes, and other non-standard paper sizes
- Paper Output: One 500-sheet face-down tray
- Interfaces: IEEE 1284 Parallel, USB, 10/100BaseT, 10Base2
- Printer Languages: PCL5e, Adobe Postscript 3

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Chapter 1

Getting Started

In this Chapter . . .

Chapter 1

Getting Started

In this Chapter . . .

About this Chapter

This chapter reviews the contents of the printer packaging, explains the parts of the printer, and describes the space and environment requirements of the printer.

Package Contents

The items shown in the following figure are included in the printer packaging. If any items are missing or damaged, contact your dealer.

NOTE: If you have not unpacked and installed your printer, please refer to the pictorial unpacking instructions and the Installation Guide included in the printer packaging.

SIB007F	SIB101F	SIB008AF
Printer main unit	**Toner Cartridge**	**A4/Letter 500-sheet Paper Tray**
SIB011F		
Power Cord	**Unpacking Instructions**	**Installation Guide**
	PageMaster 280 Electronic Library CD-ROM	**Remote Control Software CD-ROM**
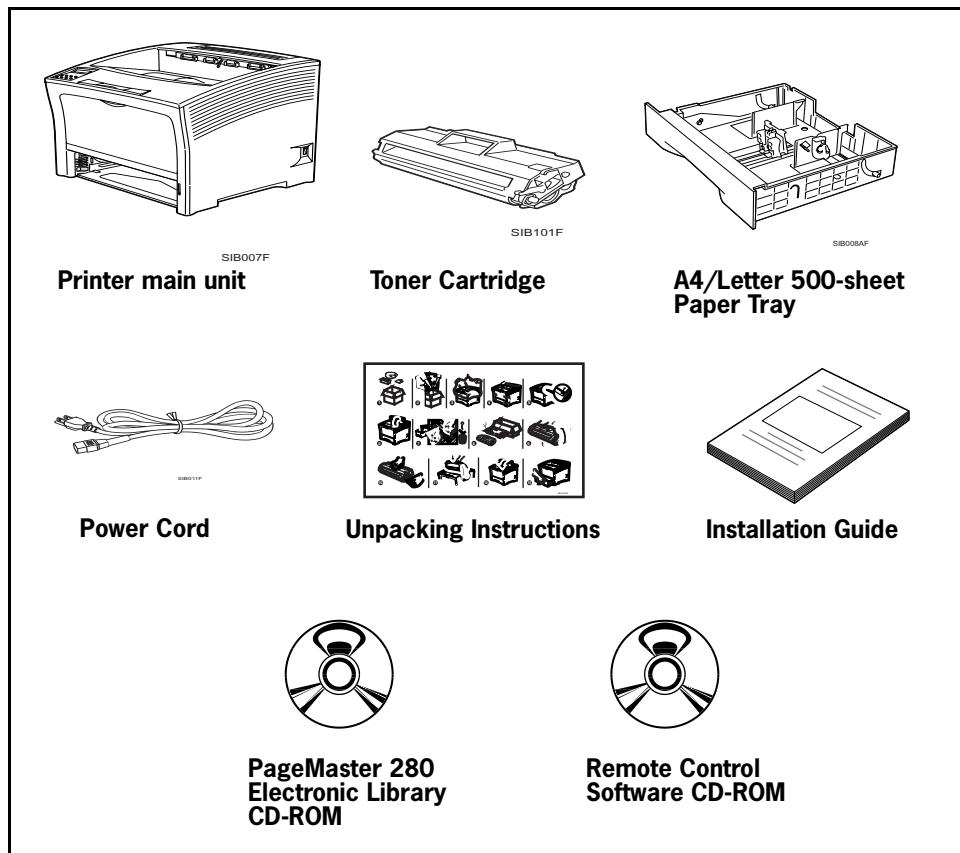
CD-ROM Contents

The two CD-ROMs provided with your printer include the following contents:

• Electronic Library CD-ROM

  The Electronic Library CD-ROM contains printer drivers, software, and documentation designed to help you fully utilize the printer, and also contains Adobe PostScript fonts that match those available on the printer.

• Remote Control Software (RCS) CD-ROM

  The RCS CD-ROM contains remote control software that enables your Network/System Administrator to manage all of your network printers from a single desktop.

Printer Location Requirements

Printer Weight and Dimensions

This printer weighs approximately 55 lbs (25 kg) and should always be lifted by two people. The dimensions of the printer are listed below.

- Printer Height: 15.6 in (395 mm)
- Printer Width (left to right): 19.3 in (490 mm)
- Printer Depth (front to back): 18.1 in (460 mm)

Space Requirements

A certain amount of space is required for proper operation of the printer and also for performing printer maintenance and replacing consumables. The following figures indicate the necessary clearances for each side of the printer.

⚠ CAUTION: There is a ventilation opening on the left side of the printer. To avoid overheating and fire hazards, be sure to leave a clearance of at least 8 inches (200 mm) between this opening and the nearest wall or other surface.

4 inches (100 mm)

20 inches (500 mm)

30 inches (760 mm)

8 inches (200 mm)
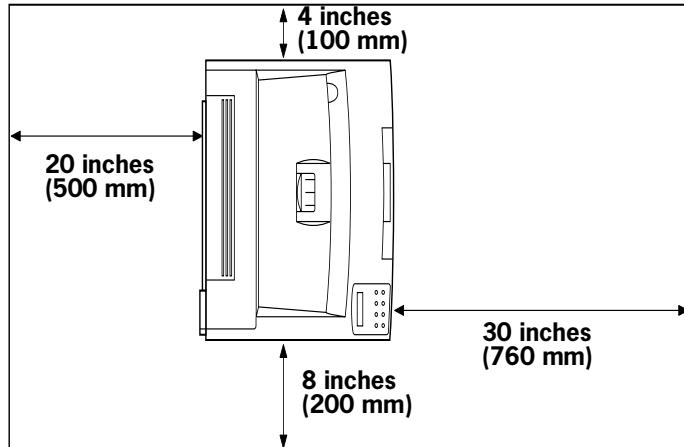
Figure 1-1: Top view of the printer.

**20 inches
(500 mm)**

**30 inches
(760 mm)**

**20 inches
(500 mm)**
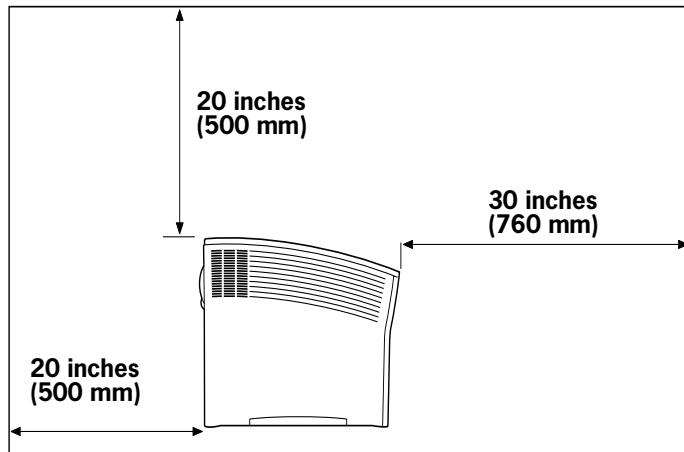
Figure 1-2: Side view of the printer.

Environment Requirements

Use the following guidelines to determine the best location for the printer:
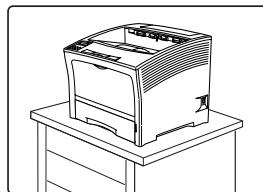
Horizontal, sturdy, and stable surface
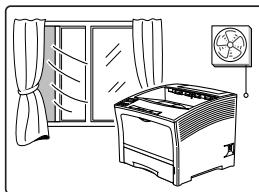
Location with good ventilation
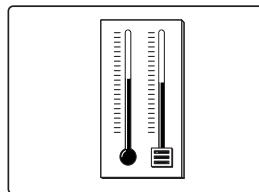
Location with stable temperature and humidity
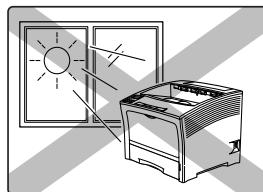
Exposed to direct sunlight
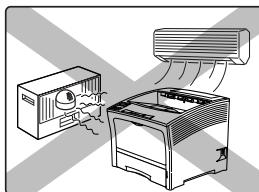
Near heating appliances
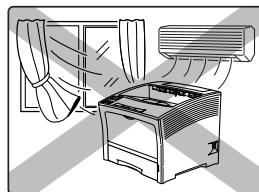
Exposed to direct air currents
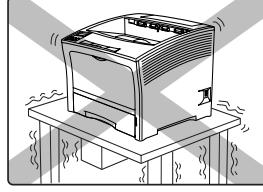
Subject to vibrations
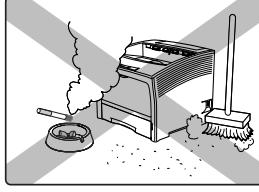
Exposed to high levels of dust and contamination
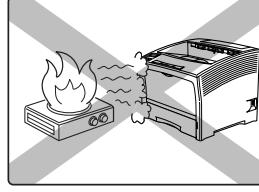
Near an open flame
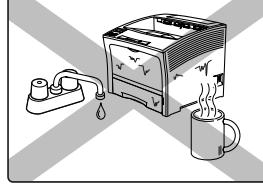
Exposed to water and high humidity
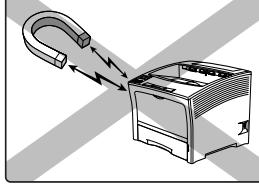
Exposed to magnetic fields
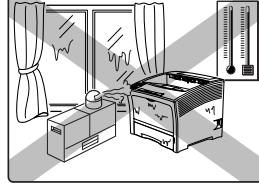
Subject to extreme variations in temperature and humidity

Electrical Requirements

For correct printer operation, install the printer in a location where the AC wall outlet meets the following electrical requirements.

- **PageMaster 280, 110V:**
  90~132 Volts AC grounded @ 50/60 Hz,
  9 AMP current draw

- **PageMaster 280, 220V:**
  198~264 Volts AC grounded @ 50/60 Hz
  4 AMP current draw

CAUTION: Never plug a 110VAC printer into a 220VAC wall outlet or plug the printer into a wall outlet that does not meet the current draw requirement of the printer. Consult an electrician if you are uncertain about the voltage rating of an AC wall outlet

Parts of the Printer

The following figures indicate the names and functions of the main parts of the printer.

Control panel
Provides access to all controls required to operate the printer.

Paper output tray
Holds printed sheets.

Paper exit slot
Releases printed sheets from the inside of the printer.

Extension tray
Holds large paper output.

Power switch
Turns the printer on and off.

Front paper tray
Provides an alternate method of feeding paper to the printer. Accommodates various print media including envelopes, transparencies, and labels.

500-sheet universal paper tray
Holds paper up to Letter or A4 size.

Paper amount indicator
Indicates the approximate remaining amount of paper.

Paper feeder
Holds the paper tray.

Figure 1-3: Front of the Printer.

Offset output tray cover
Covers the components used when the optional offset output tray is installed. Remove when installing the offset output tray.

Rear cover
Provides access to the rear of the printer; allows you to remove jammed paper.

Top cover
Provides access to the inside of the printer; allows you to replace the Toner Cartridge or remove jammed paper.

Ventilation slot
Releases hot air produced inside the printer to prevent overheating.

Power cord connector
Provides point of connection for power cord.

SIB013F

Figure 1-4: Rear of the Printer.

Fuser
Fixes toner onto the paper.

Rear cover
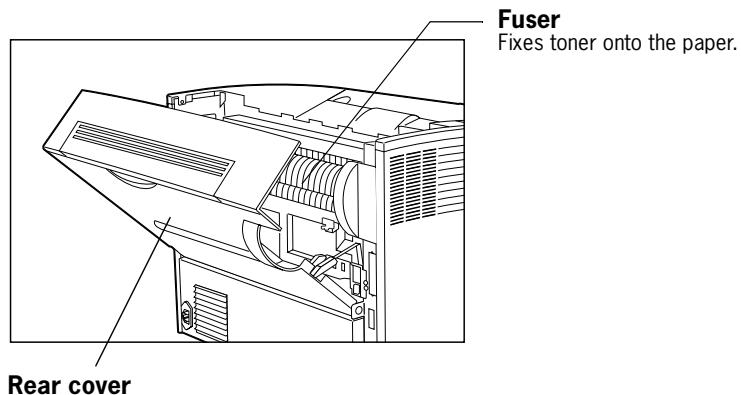
Figure 1-5: Internal Parts of the Printer.

CAUTION: The fuser becomes very hot while the printer is operating. If you need to remove the drum cartridge to remove a paper jam, turn the power off and wait at least 10 minutes before removing the drum cartridge and touching the fuser.
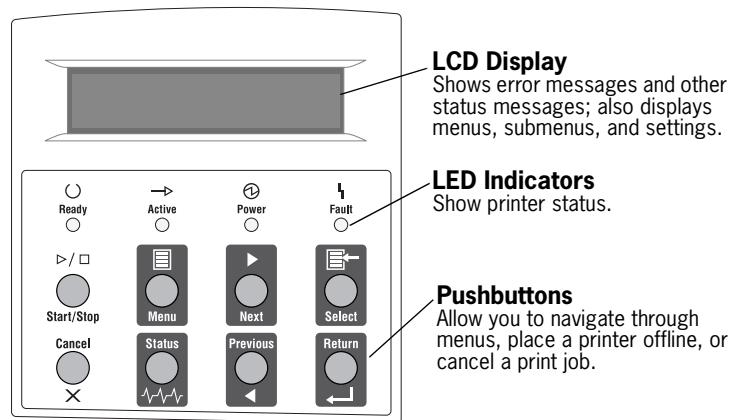
Figure 1-6: Control Panel.

Optional Printer Accessories

The following figure shows all of the available accessories as installed on the printer:

Offset Output Tray
Holds and separates large print jobs using an offset.

500-Sheet Feeder
Provides extra paper capacity and oversize paper feeding capability. The printer can accommodate two additional 500-sheet feeders if the optional HCF is not installed.

High Capacity Feeder (HCF)
Holds up to 2000 sheets A4 or Letter paper. The printer can accommodate one 500-sheet feeder when the HCF is installed.

A3 paper tray
Holds paper of various sizes, up to A3.

Duplexer
Enables two-sided printing.

A4/letter 500-sheet paper tray
Holds paper of various sizes, up to A4 or letter.

Figure 1-7: Optional Accessories.

Paper Path

The following figure shows the path that paper travels through the printer:

1. The paper is initially fed from the front paper tray or one of the other paper trays.

2. The image is transferred from the photosensitive drum onto the paper.

3. The fuser fixes the toner permanently on the paper.

4. After passing through the duplex printing unit, the paper is fed once more through steps (2) and (3).

5. The paper emerges onto the output tray, or the offset output tray if installed.
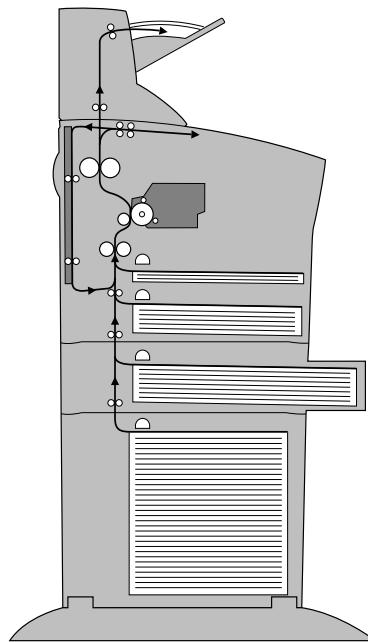
SIB016F

Figure 1-8: Paper Path.

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Chapter 2

Using the Printer

In this Chapter . . .

About this Chapter

This chapter provides information concerning the daily use of the printer, including procedures for connecting the printer and loading print media, and guidelines for selecting print media.

Connecting the Printer to the AC Outlet

1. Insert the power cord into the AC connector on the rear of the printer.
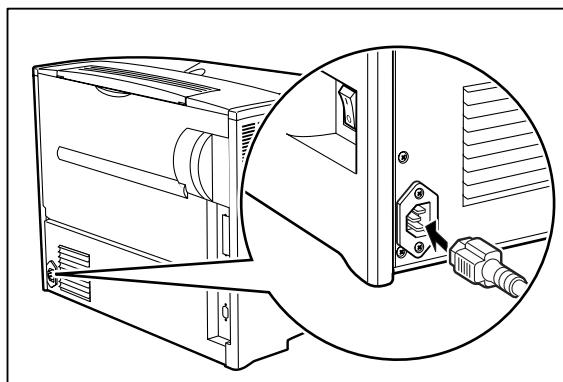
2. Verify that the power switch of the printer is in the [O] (off) position, then insert the plug of the power cord into the AC outlet.
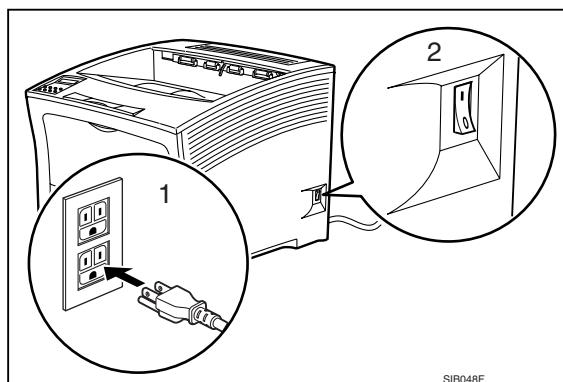
> ⚠ WARNING: Never touch the power cord or plug with wet hands, to prevent the risk of electric shock. When disconnecting, always grasp the plug and do not pull on the cable. Damage to the cord can lead to fire and electric shock.

Turning Power On and Off

Use the following procedure to turn the printer on:

1. Turn the printer on by pressing [I] on the power switch on the right side of the printer.
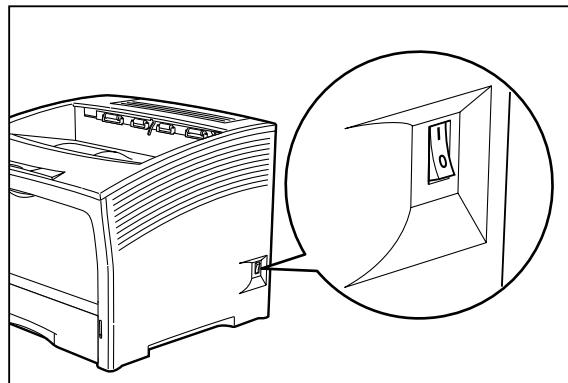
The status message "**Loading**" appears on the display. This message indicates that the printer is warming up and is not ready to print. After about 60 seconds, the status message changes to "**Ready**", indicating that the printer is ready to print.

Loading		**Ready**

NOTE: If an error message appears on the display after you turn the printer on, refer to "Warning Messages and Error Messages" on page 5-39.

Use the following procedure to turn the printer off:

1. Turn the printer off by pressing the [O] on the power switch on the right side of the printer.
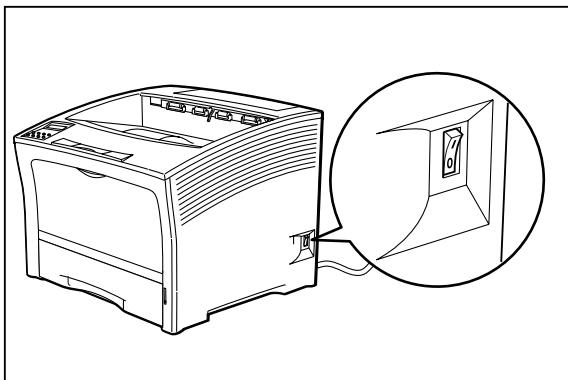
Connecting the Printer to the Host Computer

You must connect the printer to your computer using an IEEE 1284 parallel cable or a USB cable. These cables are user-supplied, the printer does not include either of these cables. The parallel and USB ports can not be used simultaneously, and the default configuration of your printer has the USB port turned off.

NOTE: When you turn the USB port on, the parallel port is automatically turned off. When you turn the parallel port on, the USB port is automatically turned off.

Parallel Port

The parallel port is the default port. To connect the printer to your computer using the parallel port, simply connect the parallel cable to the parallel port on the printer, then connect the cable to your computer. Use the following procedure to verify that the parallel port is turned on and to change the parallel port **Interface**, **Format**, and **Mode** settings:

1. Press the **MENU** button on the control panel.

2. Press the **NEXT** button until the text "**Interface Menu**" is shown on the second line of the display.

3. Press the **SELECT** button to enter the interface menu.

4. Press the **NEXT** button until the text "**Port**" is shown on the second line of the display.

5. Press the **SELECT** button to enter the port submenu.

6. Press the **NEXT** button until the text "**Parallel**" is shown on the second line of the display.

7. Press the **SELECT** button to enter the parallel submenu.

8. Verify that the second line of the display contains the text "**On**", or press the **NEXT** button until the text "**On**" is shown on the second line of the display.

9. Press the **SELECT** button to change the parallel setting to **On**. After you have pressed the **SELECT** button, the first line of the control panel display should contain the text "**Port**", and the second line should contain the text "**Parallel**".

10. Press the **RETURN** button to return to the interface menu. The first line of the display should contain the text "**Interface Menu**", and the second line should contain the text "**Port**".

11. Press the **NEXT** button until the text "**Parallel Setup**" is shown on the second line of the display.

12. Press the **SELECT** button to enter the parallel setup submenu.

13. Press the **NEXT** button until the text "**Interpreter**" is shown on the second line of the display.

14. Press the **SELECT** button to enter the interpreter submenu.

15. Press the **NEXT** button until the desired interpreter is shown on the second line of the display. The available interpreter settings include **Auto Switch**, **PCL**, and **PostScript 3**.

16. Press the **SELECT** button to select the interpreter that you specified in the previous step. After you have pressed the **SELECT** button, the first line of the display should contain the text "**Parallel Setup**", and the second line should contain the text "**Interpreter**".

17. Press the **NEXT** button until the text "**Format**" is shown on the second line of the display.

18. Press the **SELECT** button to enter the format submenu.

19. Press the **NEXT** button until the desired format is shown on the second line of the display. The available format settings include **Raw**, **Normal**, and **Binary**.

20. Press the **SELECT** button to select the format that you specified in the previous step. After you have pressed the **SELECT** button, the first line of the display should contain the text "**Parallel Setup**", and the second line should contain the text "**Format**".

21. Press the **NEXT** button until the text "**Mode**" is shown on the second line of the display.

22. Press the **SELECT** button to enter the mode submenu.

23. Press the **NEXT** button until the desired mode is shown on the second line of the display. The available mode settings include **Bidirectional** and **Standard**.

24. Press the **SELECT** button to select the mode that you specified in the previous step. After you have pressed the **SELECT** button, the first line of the display should contain the text "**Parallel Setup**", and the second line should contain the text "**Mode**".

25. Press the **RETURN** button twice to return to the main menu.

26. Press the **START/STOP** button to exit the menu system.

USB Port

The USB port of your printer provides a reliable, high-speed, bi-directional connection between your printer and PC, The USB standard is designed to deliver complex, graphic-rich documents to the printer with speed and accuracy. USB-enabled printers and PCs allow up to 127 devices to be attached to a single USB port. Fast 12Mbps communication from your PC and printer with absolute reliability.

OS Support

The USB port of your printer supports the following operating system environments:

- **Microsoft Windows 95b and 95c (also known as OSR 2.0, OSR 2.1 and OSR 2.5)**

  If you are using one of these operating systems, your PC may require an optional upgrade to work properly with USB. This upgrade is called USBSUPP.EXE and is provided in the \OTHER\USB directory of your Windows 95 CD-ROM. Compuprint does not supply this update. To find out if your hardware/operating system combination supports USB, run the free program USBREADY.EXE, available from **www.usb.org**.

- **Microsoft Windows 98 and 98se**

  These operating systems come with complete support for USB. You should still run USBREADY.EXE from **www.usb.org** to ensure that the required software and hardware are installed.

- **Apple Mac OS 8.6 and above**

  This version of Apple's operating system ships with the USB equipped systems and contains the necessary code to support USB. No additional software or hardware should be required.

Hardware Support

The USB port of your printer supports the following hardware:

- **Intel**

Most recent Intel systems will contain the needed components. However, there are a number of older systems that, while having USB hardware, have an obsolete USB implementation . Your Compuprint USB printer will not work with these older systems unless a separate USB controller card is installed in your system. It is possible to have working hardware but not have a physical port, in which case the proper connector must be purchased from the system supplier.

NOTE: Systems made in 1996 and earlier probably do not support USB correctly on the motherboard; systems made in 1997 may or may not properly support USB; and systems made since 1998 probably do support USB correctly.

- **Apple**

  The Apple iMac and G3/G4 systems come with working USB hardware and fully support your Compuprint USB printer. Older PCI-based Macintosh systems may be upgraded with a USB card. This configuration should work with the correct version of the operating system.

Installation for Windows

Use the following procedure to install USB for Windows:

1. Verify that your system supports USB and has an available USB connector. If you do not have an available connector, you may need to purchase a USB hub.

NOTE: You may use an unpowered USB hub, since the printer is considered a self-powered device and will not draw power from the USB port.

2. Power on the host system and the printer and allow the two systems to finish booting.

3. Attach the USB cable to both the printer and the host. It does not matter which host connector you attach the cable to; however, make sure you always attach it to the same connector.

NOTE: The USB printer port created is associated with the actual port to which the device is attached. If the printer is attached to a different hardware port, a new USB printer port will be created, even though it is attached to the same printer.

The maximum length of a USB cable is 16 feet (5 meters). Longer distances may be spanned if intervening hubs are used. There is a limit of 5 hubs between the host and any given device, giving a maximum distance of 98 feet (30 meters).

4. Windows displays a dialog box stating that new hardware has been found and Windows is searching for a driver.

5. Browse to the location of the USB port software and select the appropriate version for either Windows 95 or Windows 98 (\Software\USB\Win95 or \Software\USB\Win98 on your CD-ROM or the location where you expanded the driver files).

6. Windows creates a GNUSBn printer port.

7. At this point, you may install the printer normally, either by using the "Add Printer" wizard or by running the appropriate setup program, or your system may announce that "New Hardware has been found". In either case, install the driver required for your printer at this time.

8. After the printer has been installed, make sure that it prints to the GNUSBn port.

9. Ensure that the Spooler settings for the printer have "Disable bi-directional support for this printer" checked.

10. Your Compuprint USB printer is now ready to print.

Installation for Mac OS 8.6

1. Power on the printer and the host computer.

2. Ensure that the "Apple LaserWriter Software" is installed.

3. Attach the USB cable to the host and the printer. Note that the printer is considered a "self powered" device and as such may be plugged into any available USB port on the Macintosh, including the one on the keyboard .

NOTE: The keyboard USB port on an iMac can only source a minimal amount of power. Plugging a bus-powered device into this port can cause problems because of insufficient power. Since the Compuprint USB Printer draws no power from the bus, it should be possible to use this port without affecting other USB devices.

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4. Open the "Desktop Printer Utility" (installed when you installed the Apple Laser Writer Software).

5. Choose the correct driver to use, depending on the printer you are installing.

6. Choose "Printer (USB)" and press "OK".

7. Choose the PPD file that corresponds to your printer.

8. Choose the correct printer.

9. Press "Create".

10. You now have a desktop shortcut to the Compuprint USB printer and are ready to print.

Using the USB Port

If you would like to use the USB port instead of the parallel port, use the following procedure to turn the USB port on and change the USB interface and format settings on the printer:

1. Press the **MENU** button on the control panel.

2. Press the **NEXT** button until the text "**Interface Menu**" is shown on the second line of the display.

3. Press the **SELECT** button to enter the interface menu.

4. Press the **NEXT** button until the text "**Port**" is shown on the second line of the display.

5. Press the **SELECT** button to enter the port submenu.

6. Press the **NEXT** button until the text "**USB**" is shown on the second line of the display.

7. Press the **SELECT** button to enter the USB submenu.

8. Press the **NEXT** button until the text "**On**" is shown on the second line of the display.

9. Press the **SELECT** button to change the USB setting to **On**. After you have pressed the **SELECT** button, the first line of the control panel display should contain the text "**Port**", and the second line should contain the text "**USB**".

10. Press the **RETURN** button to return to the interface menu. The first line of the display should contain the text "**Interface Menu**", and the second line should contain the text "**Port**".

11. Press the **NEXT** button until the text "**USB Setup**" is shown on the second line of the display.

12. Press the **SELECT** button to enter the USB setup submenu.

13. Press the **NEXT** button until the text "**Interpreter**" is shown on the second line of the display.

14. Press the **SELECT** button to enter the interpreter submenu.

15. Press the **NEXT** button until the desired interpreter is shown on the second line of the display. The available interpreter settings include **Auto Switch**, **PCL**, and **PostScript 3**.

16. Press the **SELECT** button to select the interpreter that you chose in the previous step. After you have pressed the SELECT button, the first line of the display should contain the text "**USB Setup**", and the second line should contain the text "**Interpreter**".

17. Press the **NEXT** button until the text "**Format**" is shown on the second line of the display.

18. Press the **SELECT** button to enter the format submenu.

19. Press the **NEXT** button until the desired format is shown on the second line of the display. The available format settings include **Raw**, **Normal**, and **Binary**.

20. Press the **SELECT** button to select the format setting that you specified in the previous step. After you have pressed the **SELECT** button, the first line of the display should contain the text "**USB Setup**", and the second line should contain the text "**Format**".

21. Press the **RETURN** button twice to return to the main menu.

22. Press the **START/STOP** button to exit the menu system.

USB Resources

If you would like more information about USB, refer to the www.usb.org website. This organization is responsible for the determining the USB standard and has a number of FAQ's available that should answer most questions.

Selecting Print Media

Your printer can print on a variety of media, including plain paper, labels, transparencies, and envelopes. Always use print media that meet the guidelines for use with this printer. Print media that is not recommended for use with this printer may cause frequent paper jams or poor print quality.

Paper and Print Media To Avoid

Do not use paper or print media that has any of the following characteristics:

- Does not meet the paper and media size and weight specifications for this printer
- Is not labeled for use with xerographic printers or xerographic copiers
- Cannot withstand temperatures of up to 310°F/155°C
- Is in a sealed package that is obviously damaged or wet
- Is excessively wrinkled, curled, torn, or warped
- Is folded or creased
- Has either an extremely slick surface or an extremely textured surface
- Has an exposed adhesive surface
- Has paper pieces glued or taped to the media

- Has staples or paperclips attached
- Is categorized as thermal paper, coated paper, or carbon paper
- Is an envelope that is embossed, is made of extremely thick paper, or is padded
- Is an envelope that has metal clasps
- Is a sheet of labels that has the backing sheet exposed between individual labels

Correct Paper Storage

It is important to store paper correctly prior to placing it in the printer, since improper storage can cause frequent paper jams and poor print quality. Use the following guidelines when storing paper for use in the printer:

- Store reams of paper on a flat surface, and always store them stacked horizontally.
- Store reams of paper in an area away from both direct sunlight and high humidity
- Open sealed reams only when you are ready to load the paper into the paper tray, and always close and seal partial reams of paper.
- Do not stack partial reams of paper

Print Media Capacities

Your printer can hold up to 3,150 sheets of standard weight paper, depending upon the options installed. The printer can be configured in the following five variations:

- Printer (650 sheets)
- Printer with 500 sheet feeder(1150 sheets)
- Printer with two 500 sheet feeders (1650 sheets)
- Printer with high capacity feeder(2650 sheets)
- Printer with high capacity feeder and 500 sheet feeder (3150 sheets)

The following table shows the five configurations and the breakdown of paper capacity:

Front Tray (standard)	Tray 1 (standard)	Tray 2 (option)	Tray 3 (option)	High Capacity Feeder (option)	Total Paper Capacity
150	500	–	–	–	650
150	500	500	–	–	1,150
150	500	500	500	–	1,650
150	500	–	–	2,000	2,650
150	500	500	–	2,000	3,150

If you want to use paper that is an odd size or weight, you must use the front paper tray. The front tray can hold the following quantities of non-standard print media:

- Envelopes : 10
- Transparencies: 30

- Labels: 30
- Paper: 150

NOTE: Expect a slight reduction in image quality when you print on envelopes, labels, transparencies, or postcards.

Print Media Weight, Type, and Size

The following table defines print media that you can use in each of the paper sources, and also indicates the feed orientation—long edge feed (LEF) or short edge feed (SEF). If you have concerns about a specific brand or type of media, try samples of the media to determine if the resulting printer performance and print quality meet your expectations.

| Paper Source	Weight	Paper Type and Feed Direction	Paper Sizes Accommodated
Letter/A4 Paper Tray (main tray and optional 500 sheet A4/Letter paper feeder)	16 to 24 lbs. 64 to 200g/m^2	A4 LEF	297 x 210mm 11.7 x 8.27 inches
		Letter LEF	279.4 x 215.9mm 8.5 x 11 inches
		Executive LEF	266.7 x 184.5mm 10.5 x 7.26 inches
		Monarch LEF (envelope)	190.5 x 98.4mm 7.5 x 3.87 inches
		Statement LEF	215.9 x 139.7mm 8.5 x 5.5 inches
		Com 10 LEF (envelope)	241.3 x 104.8mm 9.5 x 4.13 inches
		B5 LEF	257 x 182mm 10.1 x 7.2 inches
		A5 LEF	210 x 149mm 8.27 x 5.9 inches
		A6 LEF	100 x 148mm 3.94 x 5.83 inches
		C5 LEF (envelope)	229 x 162mm 9 x 6.4 inches
		DL LEF (envelope)	220 x 110mm 8.67 x 4.3 inches
Front Tray		Envelopes Transparencies Labels Standard Paper (LEF and SEF)	**Width:** 3.0 to 12.0 inches 76.2 mm to 305 mm **Length:** 3.87 to 20.0 inches 98.4 mm to 508 mm

| Paper Source	Weight	Paper Type and Feed Direction	Paper Sizes Accommodated
A3 Paper Tray (optional 500 sheet A3/Ledger paper feeder)	16 to 24 lbs. 60 to 135 g/m^2	A4 LEF/SEF	297 x 210mm 11.7 x 8.27 inches
		Letter LEF/SEF	279.4 x 215.9mm 11 x 8.5 inches
		Legal 13" SEF	330.2 x 215.9mm 13 x 8.5 inches
		Legal 14" SEF	355.6 x 215.9mm 14 x 8.5 inches
		A3 SEF	420 x 297mm 16.5 x 11.7 inches
		B4 SEF	364 x 257mm 14.3 x 10.1 inches
		Statement LEF	215.9 x 139.7mm 8.5 x 5.5 inches
		Executive LEF	266.7 x 184.5mm 10.5 x 7.26 inches
		Ledger SEF	431.8 x 279.4mm 11 x 17 inches
		B5 LEF	257 x 182mm 10.1 x 7.2 inches
		A5 LEF	210 x 149mm 8.27 x 5.9 inches
High Capacity Feeder	16 to 24 lbs. 60 to 135 g/m^2	A4 LEF	297 x 210mm 11.7 x 8.27 inches
		Letter LEF	279.4 x 215.9mm 11 x 8.5 inches

Loading Print Media

Loading the Main Tray

The 500-sheet paper tray that sits inside the printer can accommodate paper sizes up to letter or A4. The tray has two length guides that are located on the sides of the tray, and one width guide that is located near the center of the tray. These guides allow you to adjust the size of the area that holds paper.

Use the following procedure to load paper into the 500-sheet A4/letter paper tray:
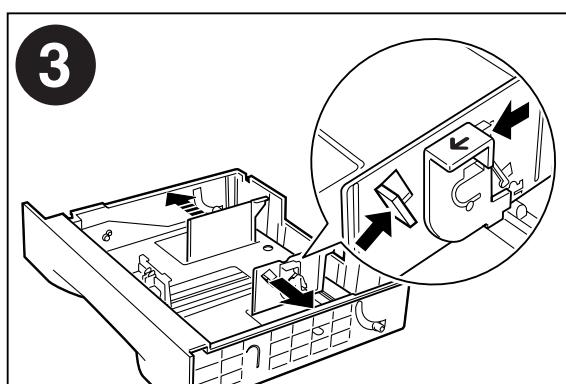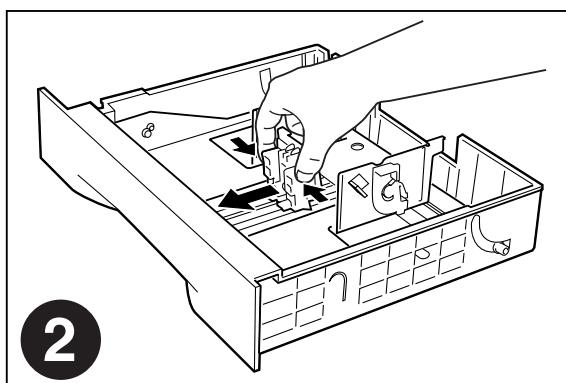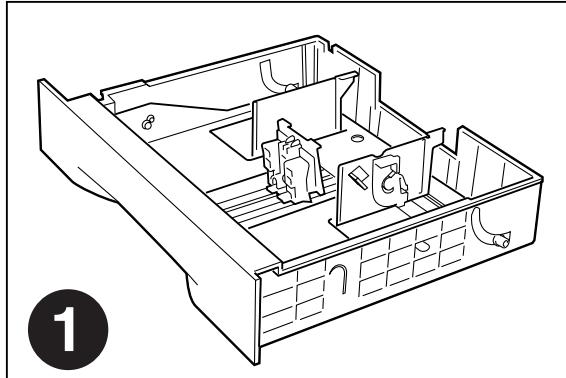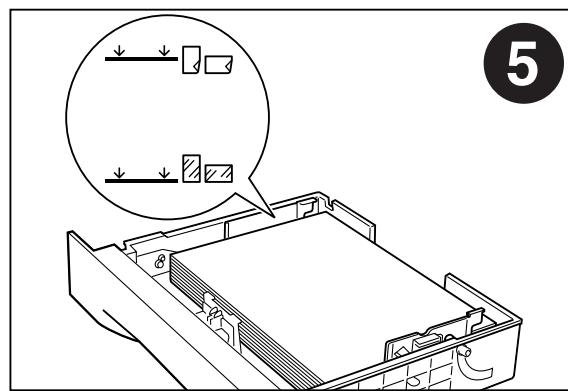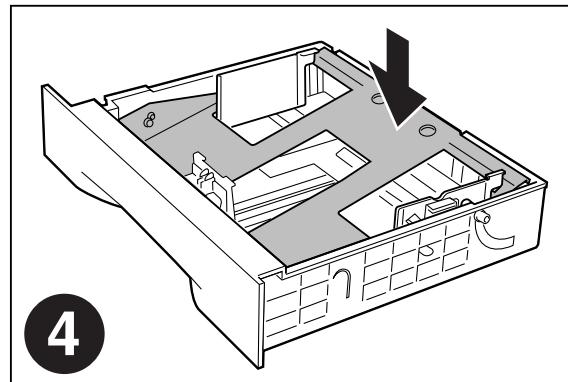
CAUTION: Do not overload the tray, and make sure the paper stack is beneath the retaining clips on both sides of the tray. Fan paper before placing it in the tray, and place paper in the tray with the print side up.

NOTE: To avoid paper jams and other paper transportation problems, make sure the length and width guides are adjusted to match the paper size and are locked firmly into place.
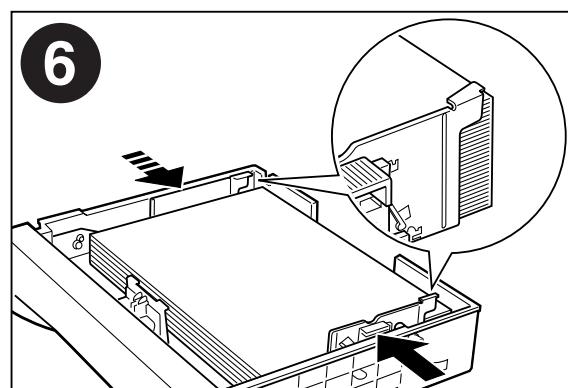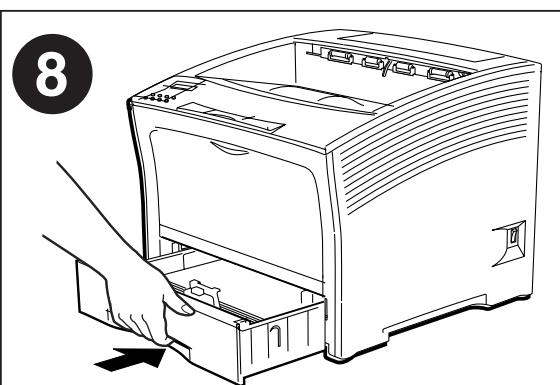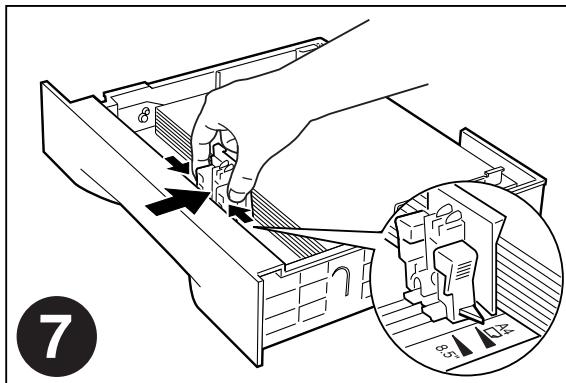
Loading the Front Tray

The front tray located on the front of the printer can accommodate a maximum of 150 sheets of paper sizes up to A3 or 8.5 x 17 inches; the front tray can also accommodate a maximum of 30 sheets of standard labels, transparencies, or postcards, and a maximum of 10 standard envelopes. The tray has two guides that are located on the left and right sides of the tray. These guides allow you to adjust the size of the area that holds the print media. Use the following guidelines when loading the front tray:

- Do not mix print media in the front tray; for example, do not load a stack that includes both envelopes and standard paper. Load only one type of print media.
- Do not mix print media sizes in the front tray; for example, do not load a stack that includes two or more different sizes of paper.
- Do not load print media that is obviously damaged, wet, creased, or wrinkled.
- Do not overfill the front tray.

Loading Paper in the Front Tray

Use the following procedure to load paper in the front tray:

1. Open the front tray by pulling the hand grip on the top of the front tray cover.
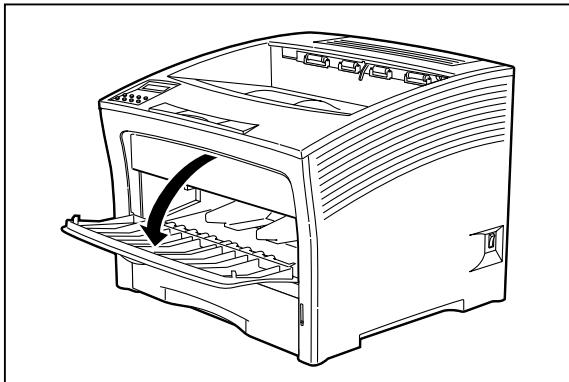
2. Slide the paper guides so they match the size of the paper that you are loading.

8.5 x 11"   A5   B5   A4
   A4   B4   A3
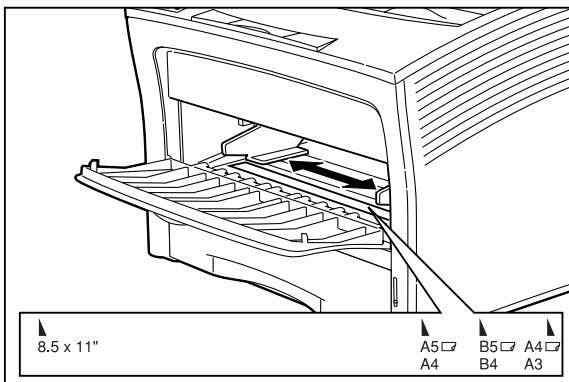
3. Lift the front tray up and out as shown on the label inside the front tray.

4. Stack the paper that you will load in the front tray, making sure that the edges are aligned and neat. Position the paper stack so the surface to be printed faces up.

5. Load the stack of paper into the front tray by sliding the stack between the paper guides and then pushing the paper stack into the tray until it will not go any further.
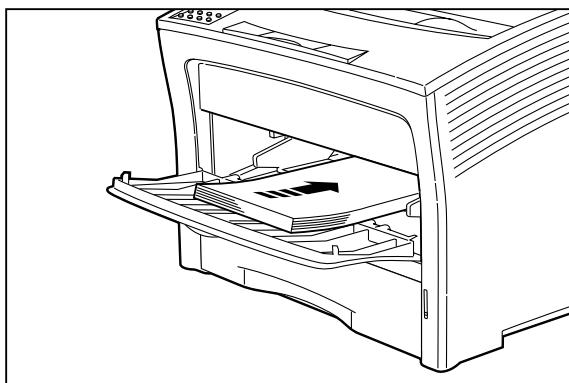
6. Check the paper stack to make sure it is not loaded at an angle and that the guides barely touch the stack.

CAUTION: Do not press the guides tightly against the stack; the guides should just barely touch the stack of paper. Paper guides that are too tight can cause feed jams.
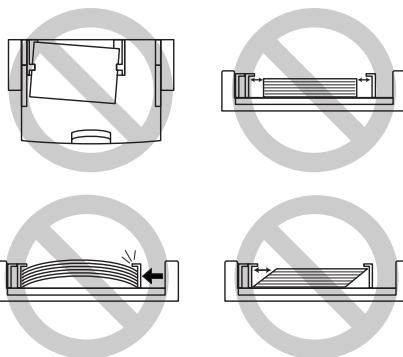
Loading Envelopes in the Front Tray

1. Open the front tray by pulling on the hand grip on the top of the tray.

2. Slide the paper guides all the way to the sides of the front tray.

8.5 x 11"   A5   B5   A4
   A4   B4   A3
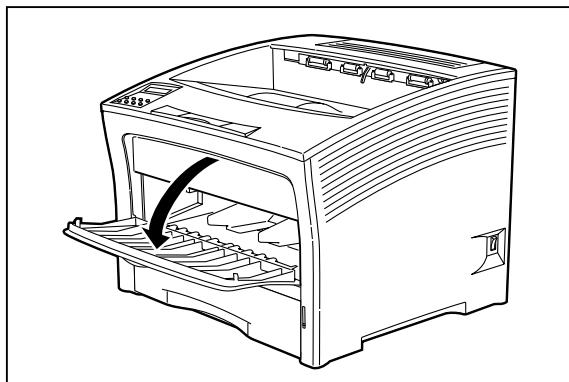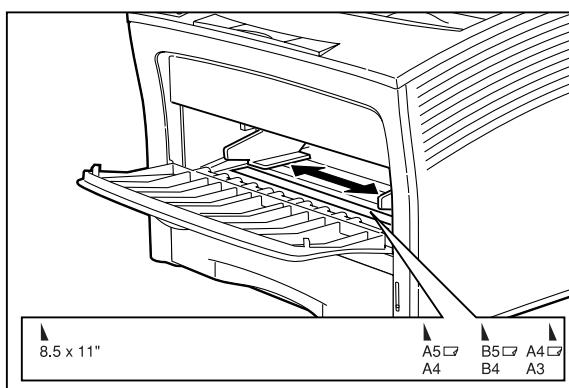
3. Pull the front tray up and out of the printer, as shown on the label inside the front tray.

4. Open the flap of each envelope and place the envelopes in a neat and aligned stack that does not exceed 10 envelopes.
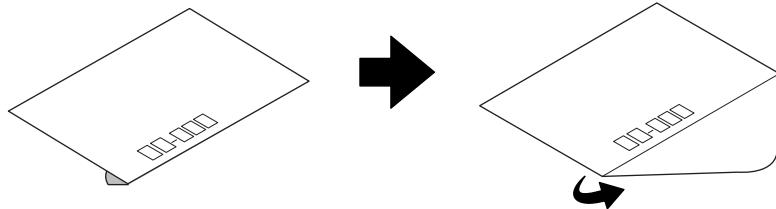
5. Position the envelope stack so the surface to be printed faces up and the flaps are open.

6. Load the stack of envelopes into the front tray by sliding the stack between the paper guides and then pushing the envelope stack into the tray until it will not go any further.
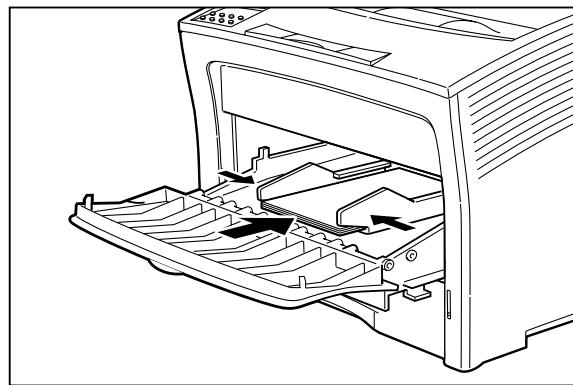
7. Slide the paper guide up against the stack of envelopes.

8. Check the envelope stack to make sure it is not loaded at an angle and that the guides barely touch the stack.

CAUTION: Do not press the guides tightly against the stack; the guides should just barely touch the stack of paper. Paper guides that are too tight can cause feed jams.
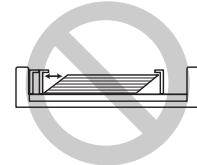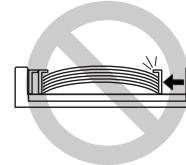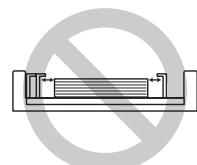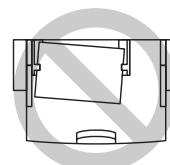
Loading Transparencies into the Front Tray

1. Open the front tray by pulling on the hand grip on the top of the tray.
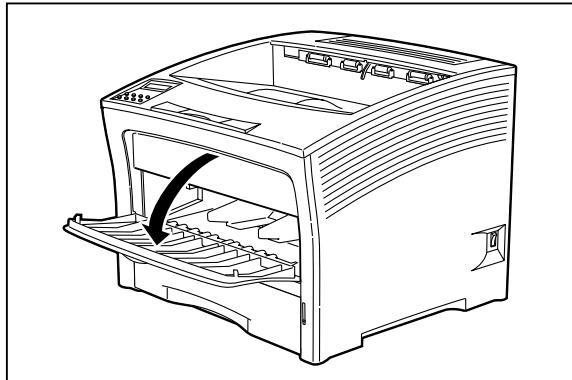
2. Slide the paper guides all the way to the sides of the front tray
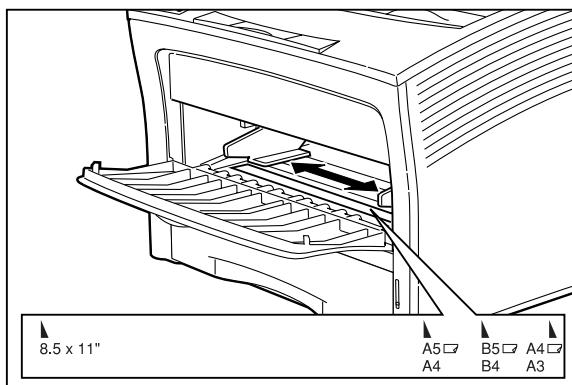
3. Load transparencies into the front tray one at a time, sliding each transparency between the paper guides and then pushing the transparency into the tray until it will not go any further.
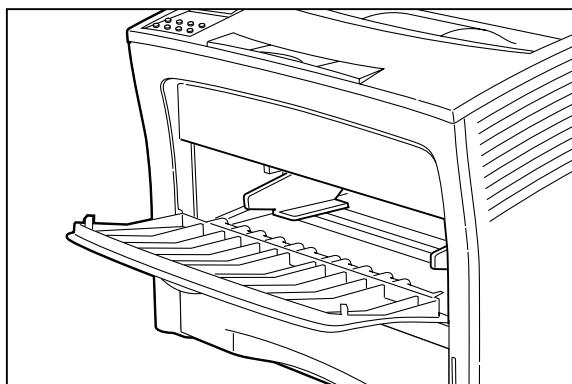
4. Slide the paper guides up against the stack of transparencies.

5. Check the transparency stack to make sure it is not loaded at an angle and that the guides barely touch the stack.

> CAUTION: Do not press the guides tightly against the stack; the guides should just barely touch the stack of paper. Paper guides that are too tight can cause feed jams.
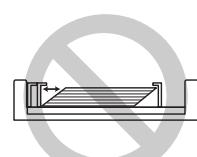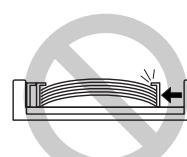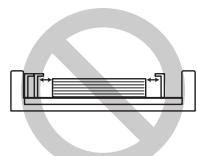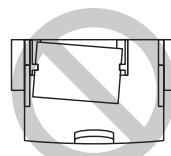
Loading Postcards into the Front Tray

1. Open the front tray by pulling on the hand grip on the top of the tray.

2. Slide the paper guides all the way to the sides of the front tray

8.5 x 11"   A5 B5 A4
A4 B4 A3
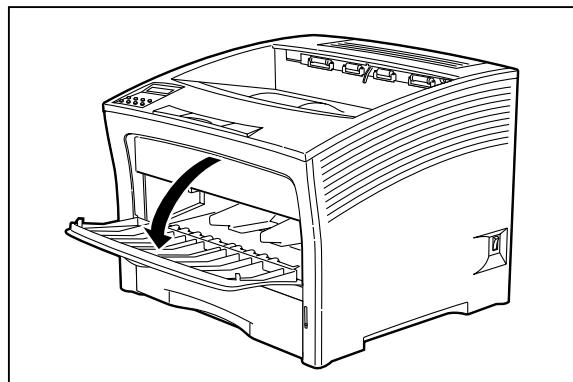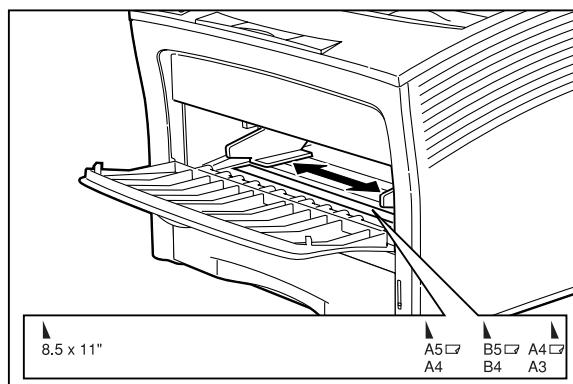
3. Position the postcard stack so the surface to be printed faces up.

4. Load the stack of postcards into the front tray, sliding the stack between the paper guides and then pushing the stack of postcards into the tray until it will not go any further.
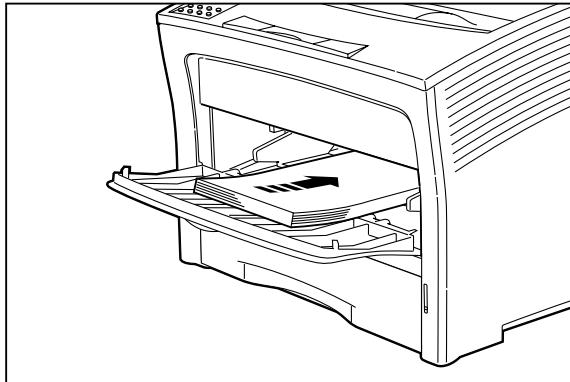

5. Slide the paper guides up against the stack of postcards.

6. Check the postcard stack to make sure it is not loaded at an angle and that the guides barely touch the stack.

CAUTION: Do not press the guides tightly against the stack; the guides should just barely touch the stack of paper. Paper guides that are too tight can cause feed jams.
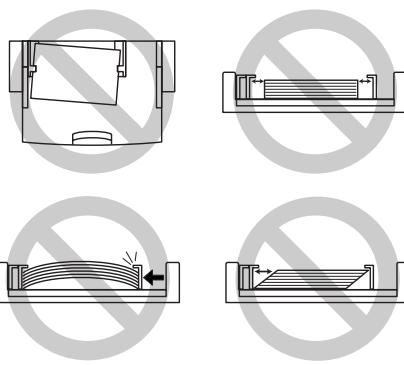
Output Options for Oversize Print Media

Non-standard paper sizes and types have a tendency to curl upon output, and may also have problems with static electricity that prevent the paper from stacking properly in the output tray. To help prevent these problems, raise the paper stop on the top output tray when you are printing on non-standard paper types, and pull out the extension tray and raise the oversize paper stop when printing on oversize papers.

◆　　◆　　◆
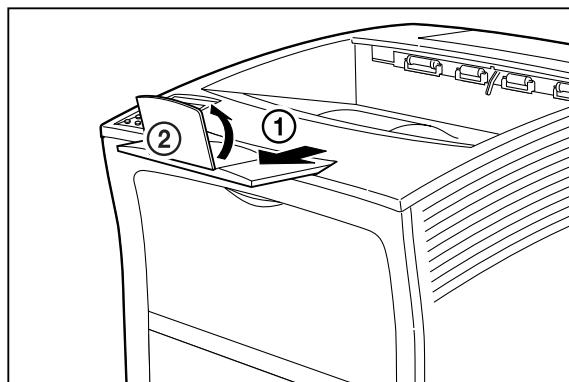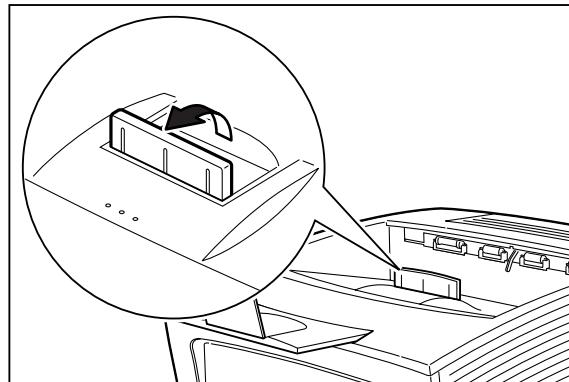
Chapter 3

Understanding and Navigating the Control Panel Menus

In this Chapter . . .

About this Chapter

This chapter explains the control panel and its functions, and also demonstrates how to navigate throughout the various menus and submenus that allow you to view and change the printer settings.

Control Panel Features

The control panel is located on the front of the printer, and contains the display, indicators, and pushbuttons that allow you to view and change the printer settings.

The figure below shows the control panel features.
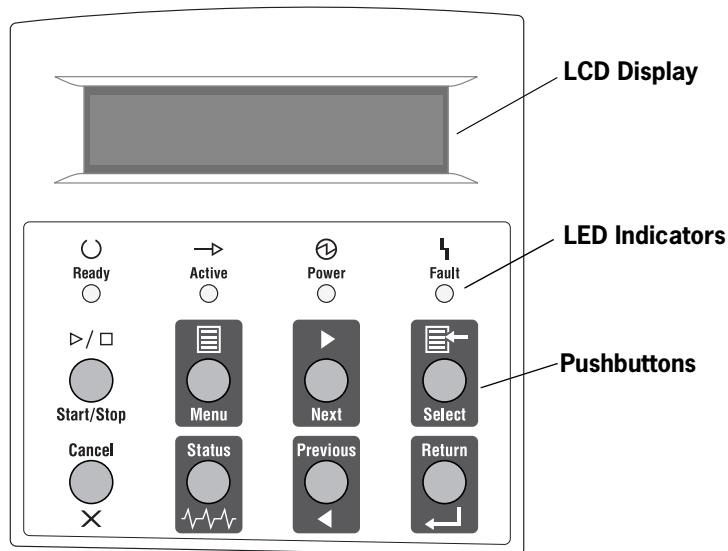
Figure 3-1: Control Panel.

LCD Display

The LCD display shows status and error messages that inform you of the current status of the printer, and also displays menus, submenus, and printer settings when you are in the menu system. The display contains two lines of text, each with a maximum of sixteen characters.

LED Indicators

The LED indicators also indicate printer status. The four indicators can each be on, off, or blinking, indicating different phases of printer operation. The table below explains the LED indicators.

LED	Color	When Off	When On	When Blinking
◯ **Ready** ◯	Green	Printer is NOT READY	Printer is READY	N/A
→ **Active** ◯	Green	Printer is IDLE	Printer is ACTIVE (processing a job)	Printer is WAITING (a partial job has been printed, and the printer is waiting for additional job data)
⏻ **Power** ◯	Green	POWER is off	POWER is on	Power Saver Mode ON
⌊ **Fault** ◯	Yellow	Printer is not in error mode	There is an error that requires user intervention, such as a paper jam, a service call required, etc.	N/A

Pushbuttons

The control panel pushbuttons allow you to access and navigate menus, and also assist you in recovering from printer errors. The table below explains the functions of the eight pushbuttons.

Pushbutton	Function
▷/□ ◯ **Start/Stop**	START/STOP—Push this button to start or stop the printer, or to exit the menu system.
▤ ◯ **Menu**	MENU—Push this button to enter the menu system.
▶ ◯ **Next**	NEXT—Push this button to move to the next menu, submenu, or setting within the same level of the menu structure.
▤ ◯ **Select**	SELECT—Push this button to select the menu or submenu that is shown on the second line of the display or to choose and save the setting shown on the second line of the display.
Cancel ◯ ✕	CANCEL—Push this button to cancel an action.
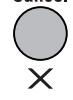
Pushbutton	Function
Status	STATUS—Push this button to enter the Status Menu and view the current status of printer.
Previous ◀	PREVIOUS—Push this button to return to the previous menu, submenu, or option within the same level of the menu structure.
Return ↵	RETURN—Push this button to move up one level in the menu structure to the menu shown on the first line of the display.
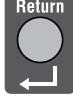
Navigating the Control Panel Menus

When you press the **MENU** button on the control panel, you enter the printer's menu system. At that point, the first line of the display contains the text "**Menu**", indicating that you are in the menu system. The second line of the display lists the active menu, which you can change by pressing the **NEXT** or **PREVIOUS** button.

```
Menu
Paper Menu
```

If you press the **NEXT** button repeatedly, the second line of the display cycles through the main menus in the following order:

- Paper Menu
- Interface Menu
- PS Menu
- PCL Menu
- System Menu
- Quality Menu
- Functions

NOTE: Additional menus and submenus may appear in the printer menu system when other options are installed.

The following figure shows the sequence of pushbuttons and display messages that would allow you to change the number of copies printed. This example illustrates the basic relationship between menus and submenus and demonstrates how the **NEXT, PREVIOUS**, **SELECT**, and **RETURN** buttons help you to navigate through the menus.
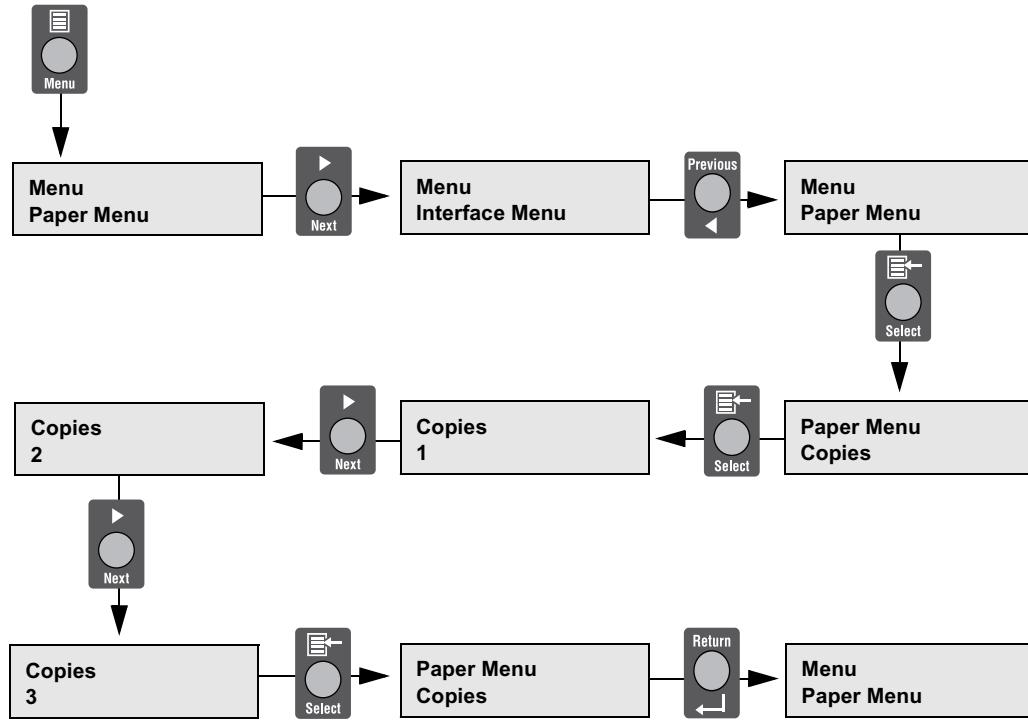
Figure 3-2: Navigating the Paper Menu.

1. Press the **MENU** button on the control panel.
2. Press the **NEXT** button until the text "**Paper Menu**" is shown on the second line of the display.
3. Press the **SELECT** button to enter the paper menu.
4. Press the **NEXT** button until the text "**Copies**" is shown on the second line of the display.
5. Press the **SELECT** button to enter the copies submenu.
6. Press the **NEXT** or **PREVIOUS** button to increase or decrease the number of copies printed.
7. Press the **SELECT** button to save this setting.
8. Press the **START/STOP** button to exit the menu system.

Menu Structure

The following figure shows the structure of the control panel main menus and submenus. For more specific information about using and navigating the printer menu system, see the User Guide provided on the Electronic Library CD-ROM.

Paper Menu	*Interface Menu*	*PS Menu*	*PCL Menu*
Copies	Port	Print PS Errors	Orientation
Default Source	*Parallel*	Manual Feed TO	Font Source
Manual Feed	*USB*		Font Number
Output Tray	Parallel Setup		Pitch
Media Size/Type	*Interpreter*		Symbol Set
Front	*Format*		Macro Filter
Tray 1	*Mode*		Lines Per Page
Tray 2 (optional)	USB Setup		CR mode
Tray 3 (optional)	*Interpreter*		LF Mode
Tray Linking	*Format*		FF Mode
Blank Pages			

System Menu	*Quality Menu*	*Functions*
Factory Defaults	Resolution	Reset Printer
Display Language	Enhancement	Print Summary
Powersaver	Toner Saver	Print Test
Wait Timeout		Print Fonts
Job Timeout		
Jam Recovery		
Hex Print		

Figure 3-3: Printer Menu Structure.

NOTE: Additional menus and submenus may appear in the printer menu system when other options are installed.

Paper Menu

The **Paper Menu** provides access to the printer settings for various paper-handling functions. Use the following procedure to enter the paper menu:

1. Press the **MENU** button on the control panel.

2. Press the **NEXT** button until the text "**Paper Menu**" is shown on the second line of the display.

3. Press the **SELECT** button to enter the Paper Menu.

4. Press the **NEXT** button to move through the submenus: **Copies**, **Default Source**, **Manual Feed**, **Output Tray**, **Media Size/Type**, **Tray Linking**, **Blank Pages**, and **Output Linking**.

5. Use the procedures in the following table to access and change the printer paper-handling settings:

Submenus	Default Setting	Available Settings		Procedure for Changing Setting
Copies This submenu allows you to change the number of copies printed.	1	Numbers 1 - 999		1. Press NEXT or PREVIOUS to increase or decrease the number of copies printed. 2. Press SELECT to save this setting.
Default Source This submenu allows you to choose a default paper source from a list of all installed sources.	Tray 1	Front Tray 1 Tray 2 (optional) Tray 3 (optional)		1. Press NEXT or PREVIOUS to scroll through the list of available sources of paper. 2. Press SELECT to set a source as the default.
Manual Feed This submenu allows you to turn the manual feed on or off.	Off	On Off		1. Press NEXT or PREVIOUS to toggle between ON and OFF. 2. Press SELECT to save this setting.
Output Tray This submenu allows you to choose a default output tray from a list of all installed output trays.	Face Down Tray	Face Down Tray Offset Tray (optional)		1. Press NEXT or PREVIOUS to scroll through the list of available output trays. 2. Press SELECT to set a tray as the default.
Media Size/Type This submenu allows you to set the media size and type for the Front Tray and set the medial type for all other trays.	**Front Tray** Size: Letter LEF Type: Plain **Tray 1** Type: Plain **Tray 2** (optional) Type: Plain **Tray 3** (optional) Type: Plain	**Size** Front Tray: Letter LEF, A4 LEF, B5, A5, Statement, Executive, C5 Envelope, DL Envelope, Com10 Envelope, Monarch Envelope, Ledger, A3, B4, Legal, Folio, A4 SEF, Letter SEF, B5 SEF	**Type** Front Tray: Plain, Transparency, Prepunched, Letterhead, Colored, Preprinted, Bond, Label, Card Stock, Postcard, Envelope, Other Other Trays: Plain, Transparency, Prepunched, Letterhead, Colored, Preprinted, Bond, Other	1. Press NEXT or PREVIOUS to scroll through the list of available sources of paper. 2. Press SELECT to choose a tray. 3. Press NEXT or PREVIOUS to toggle between MEDIA SIZE and MEDIA TYPE. 4. Press SELECT to choose either. 5. Press NEXT or PREVIOUS to scroll through the available sizes or types. 6. Press SELECT to set a size or type.
Tray Linking This submenu allows you to turn the tray linking function on or off.	On	On Off		1. Press NEXT or PREVIOUS to toggle between ON and OFF. 2. Press SELECT to save this setting.

Submenus	Default Setting	Available Settings	Procedure for Changing Setting
Blank Pages This submenu allows you to choose to either print or not print blank pages of a document.	Print	Print Do Not Print	1. Press NEXT or PREVIOUS to toggle between PRINT and DO NOT PRINT. 2. Press SELECT to save this setting.
Output Linking This submenu allows you to turn the output linking function on or off.	Off	On Off	1. Press NEXT or PREVIOUS to toggle between ON and OFF. 2. Press SELECT to save this setting.

Interface Menu

The **Interface Menu** provides access to the printer interface settings. Use the following procedure to enter the interface menu:

1. Press the **MENU** button on the control panel.

2. Press the **NEXT** button until the text "**Interface Menu**" is shown on the second line of the display.

3. Press the **SELECT** button to enter the interface menu.

4. Press the **NEXT** button to move through the submenus: **Port**, **Parallel Setup**, **and USB Setup**.

5. Use the procedures in the following table to access and change the printer interface settings:

Submenus	Default Setting	Available Settings	Procedure for Changing Setting
Port This submenu allows you to choose the type of interface. The parallel and USB ports cannot be ON simultaneously.	**Parallel:** On **USB:** Off	**Parallel :** On, Off **USB:** On, Off	1. Press NEXT or PREVIOUS to toggle between PARALLEL and USB. 2. Press SELECT to save this setting.
Parallel Setup This submenu allows you to set up the parallel interface. When the Parallel port is on, the USB port is off.	**Interpreter:** Auto Switch **Format:** Raw **Mode:** Bidirectional	**Interpreter:** Auto Switch PCL PostScript 3 **Format:** Raw Normal Binary **Mode:** Bidirectional Standard	1. Press NEXT or PREVIOUS to scroll through the INTERPRETER, FORMAT, and MODE submenus. 2. Press SELECT to choose a submenu. 3. Press NEXT or PREVIOUS to scroll through the settings. 4. Press SELECT to choose and save a setting.

Submenus	Default Setting	Available Settings	Procedure for Changing Setting
USB Setup This submenu allows you to choose set up the USB interface. When the USB port is on, the parallel port is off.	**Interpreter:** Auto Switch **Format:** Raw	**Interpreter:** Auto Switch PCL PostScript 3 **Format:** Raw Normal Binary	1. Press NEXT or PREVIOUS to toggle between INTERPRETER and FORMAT submenus. 2. Press SELECT to choose either submenu. 3. Press NEXT or PREVIOUS to scroll through the settings. 4. Press SELECT to save this setting.

PS Menu

The PS Menu provides access to the PostScript settings. Use the following procedure to enter the PS Menu:

1. Press the **MENU** button on the control panel.

2. Press the **NEXT** button until the text "**PS Menu**" is shown on the second line of the display.

3. Press the **SELECT** button to enter the PS menu.

4. Press the **NEXT** button to move through the submenus: **Print PS Errors**, and **Manual Feed TO**.

5. Press the **SELECT** button to enter a submenu.

6. Use the procedures in the following table to access and change the PostScript settings:

Submenus	Default Setting	Available Settings	Procedure for Changing Settings
Print PS Errors This submenu allows you to choose to either print or not print PS errors.	Off	On Off	1. Press NEXT or PREVIOUS to toggle between ON (print) and OFF (do not print). 2. Press SELECT to save this setting.
Manual Feed TO This submenu allows you to set the manual feed timeout—the number of seconds the printer shold wait for a manual feed. A setting of 0 will cause printer to wait indefinitely for a manual feed.	0	0 - 99999	1. Press NEXT or PREVIOUS to increase or decrease each digit of the five-digit number. 2. Press SELECT to move to the next number. 3. Press SELECT after setting the last digit to save the setting.

PCL Menu

The **PCL Menu** provides access to the PCL settings. Use the following procedure to enter the PCL menu:

1. Press the **MENU** button on the control panel.

2. Press the **NEXT** button until the text "**PCL Menu**" is shown on the second line of the display.

3. Press the **SELECT** button to enter the PCL menu.

4. Press the **NEXT** button to move through the submenus: **Print PS Errors, Manual Feed TO.**

5. Press the **SELECT** button to enter a submenu.

6. Use the procedures in the following table to access and change the PCL settings:

Submenus	Default Setting	Available Settings		Procedure for Changing Setting
Orientation This submenu allows you to choose the orientation of the page.	Portrait	Portrait Landscape		1. Press NEXT or PREVIOUS to toggle between PORTRAIT and LANDSCAPE. 2. Press SELECT to choose and save an orientation.
Font Source This submenu allows you to choose a font source.	Internal	Internal		1. Press NEXT or PREVIOUS to scroll through the available font sources. 2. Press SELECT to choose and set a source.
Font Number This submenu allows you to set the font number.	0	Numbers 0-?		1. Press NEXT or PREVIOUS to increase or decrease the font number. 2. Press SELECT to save this setting.
Pitch This submenu allows you to change the pitch of text.	10.00	0.08 - 100.00		1. Press NEXT or PREVIOUS to increase or decrease the pitch. 2. Press SELECT to save this setting.
Symbol Set This submenu allows you to choose a symbol set.	10U:PC-8 CP437	10U:PC-8 CP437 11U:PC-8 D/N 12U:PC-850 17U:PC-852 9T:PC-Turkish 19U:WIN Latin1 9E:WIN Latin2 5T:WIN Latin5 7J:Desk Top 10J:PS Text 13J:Ventura Intl 14J:Ventura US 6J:Microsoft Pub 8M:Math-8 PS:Math 6M:Ventura Math	15U:Pi Font 1U: Legal 1E: ISO4 UK 0U:ISO6 ASCII 0U:ISO11 Swedish 0I:ISO15 Italian 2S:ISO17 Spanish 1G:ISO21 German 0D:ISO60 Norweg. 1F:ISO69 French 9U:WIN3.0 Latin1 8U:Roman 8 0N:ISO 8859-1 2N:ISO 8859-2 5N:ISO 8859-5	1. Press NEXT or PREVIOUS to scroll through the available symbol sets. 2. Press SELECT to choose and set a symbol set.
Macro Filter This submenu allows you to turn the macro filter on or off.	Off	On Off		1. Press NEXT or PREVIOUS to toggle between ON and OFF. 2. Press SELECT to save this setting.

Submenus	Default Setting	Available Settings	Procedure for Changing Setting
Lines Per Page This submenu allows you to change the number of lines per page.	64	5 - 128	1. Press NEXT or PREVIOUS to increase or decrease the lines per page. 2. Press SELECT to save this setting.
CR Mode This submenu allows you top define the action prompted by a carriage return—a carriage return equals either a cariage return alone, or a carriage return and a line feed together.	CR = CR	CR = CR CR = CR/LF	1. Press NEXT or PREVIOUS to choose from CR=CR or CR=CR/LF. 2. Press SELECT to save this setting.
LF Mode This submenu allows you to define the action prompted by a line feed—a line feed equals either a line feed alone or a carriage return and a line feed together.	LF = LF	LF = LF LF = CR/LF	1. Press NEXT or PREVIOUS to choose from LF=LF or LF=CR/LF. 2. Press SELECT to save this setting.
FF Mode This submenu allows you to define the action prompted by a form feed—a form feed equals either a form feed alone or a carriage return and a form feed together.	FF = FF	FF = FF FF = CR/FF	1. Press NEXT or PREVIOUS to choose from FF=FF or FF=CR/FF. 2. Press SELECT to save this setting.

System Menu

The system menu provides access to system settings. Use the following procedure to enter the system menu:

1. Press the **MENU** button on the control panel.

2. Press the **NEXT** button until the text "**System Menu**" is shown on the second line of the display.

3. Press the **SELECT** button to enter the system menu.

4. Press the **NEXT** button to move through the submenus: **Factory Defaults, Display Language, Power Saver, Wait Timeout, Job Timeout, Jam Recovery, and Hex Print.**

5. Press the **SELECT** button to enter a submenu.

6. Use the procedures in the following table to access and change the system settings:

Submenus	Default Setting	Available Settings	Procedure for Changing Setting
Factory Defaults This submenu allows you to reset the printer to U.S. or Non-U.S. factory defaults.	U.S.	U.S. Non-U.S.	1. Press NEXT or PREVIOUS to toggles between U.S. and NON-U.S. 2. Press SELECT to choose and set the factory defaults.
Display Language This submenu allows you to change the language of the display messages.	English	English French German Italian Spanish	1. Press NEXT or PREVIOUS to scroll through the available languages: English, French (Francais), German (Deutsch), Italian (Italiano), or Spanish (Espanol). 2. Press SELECT to choose and set the language.
Power Saver This submenu allows you to set the number of minutes the printer is idle before it reverts to Power Saver Mode.	15	0 - 999	1. Press NEXT or PREVIOUS to increase or decrease the number of minutes. 2. Press SELECT to save this setting.
Wait Timeout This submenu allows you to increase or decrease the length of time (in seconds) that the printer will remain in the waiting state—a job is being processed, no end-of-file has been detected, and there is no more data to process. This setting applies to *both PCL and PostScript print jobs.*	20	0 - 99999	1. Press NEXT or PREVIOUS to increase or decrease each digit of the five-digit number. 2. Press SELECT set one digit and move to the next digit. 3. Press SELECT after changing the last digit to save this setting.
Job Timeout This submenu allows you to increase or decrease the time limit (in seconds) for PostScript jobs. A 0 setting indicates no timeout. This setting applies *only to PostScript jobs.*	0	0 - 99999	1. Press NEXT or PREVIOUS to increase or decrease each digit of the five-digit number. 2. Press SELECT set one digit and move to the next digit. 3. Press SELECT after changing the last digit to save this setting.
Jam Recovery This submenu allows you to turn jam recovery on or off.	On	On Off	1. Press NEXT or PREVIOUS to toggle between ON and OFF. 2. Press SELECT to save this setting.
Hex Print This submenu allows you to print hexadecimal characters.	Off	On Off	1. Press NEXT or PREVIOUS to toggle between ON and OFF. 2. Press SELECT to save this setting.

Quality Menu

The Quality Menu provides access to the printer settings that are related to print quality. Use the following procedure to enter the Quality Menu:

1. Press the **MENU** button on the control panel.

2. Press the **NEXT** button until the text "**Quality Menu**" is shown on the second line of the display.

3. Press the **SELECT** button to enter the system menu.

4. Press the **NEXT** button to move through the submenus: **Resolution, Enhancement, and Toner Saver.**

5. Press the **SELECT** button to enter a submenu.

6. Use the procedures in the following table to access and change the system settings:

Submenus	Default Setting	Available Settings	Procedure for Changing Setting
Resolution This submenu allows you to set the resolution (dpi).	600 dpi	300 dpi 600 dpi 1200 dpi	1. Press NEXT or PREVIOUS to scroll through the available resolutions. 2. Press SELECT to choose and set the dpi.
Enhancement This submenu allows you to choose an enhancement method.	None	None Edge Photo Edge & Photo	1. Press NEXT or PREVIOUS to scroll through the available enhancements. 2. Press SELECT to choose and set the enhancement.
Toner Saver This submenu allows you to choose from several toner-saving settings.	Off	Off Light Lighter Lightest	1. Press NEXT or PREVIOUS to scroll through the available toner settings. 2. Press SELECT to choose and save this setting.

Functions Menu

The Functions Menu provides access to several printer functions that can supply you with information about the printer and its settings. Use the following procedure to enter the Functions Menu:

1. Press the **MENU** button on the control panel.

2. Press the **NEXT** button until the text "**Functions Menu**" is shown on the second line of the display.

3. Press the **SELECT** button to enter the system menu.

4. Press the **NEXT** button to move through the available functions: **Reset Printer, Print Summary, Print test, and Print Fonts.**

5. Use the procedures in the following table to execute the functions:

Functions	Procedure for Executing Function
Reset Printer This function resets the printer.	Press SELECT to reset the printer.
Print Summary This function prints a list of all printer settings:	Press SELECT to print a summary of the printer settings.
Print Test This function allows you to print a single test page or a continuous test page.	1. Press NEXT or PREVIOUS to toggle between SINGLE PAGE and CONTINUOUS. 2. Press SELECT to print the test page(s).

Functions	Procedure for Executing Function
Print Fonts This function allows you to print Postscript or PCL font lists.	1. Press NEXT or PREVIOUS to toggle between POSTSCRIPT and PCL. 2. Press SELECT to select and print the specific fonts list.

Status Menu

In addition to the main menus listed above, the printer also provides a status menu that allows you to view the current settings for the input and output trays and the toner cartridge. Use the following procedure to enter the Status Menu:

1. Press the **STATUS** button on the control panel.

2. Press the **NEXT** button to move through the submenus: **Front, Tray 1, Tray 2, Tray 3, Face Down, and Toner.**

3. Press the **SELECT** button to enter a submenu.

4. Use the procedures in the following table to view the status of the printer:

Submenu	Procedure for Executing Function
Front This submenu allows you to view the current Media Size and Media Type for the front tray.	1. Press NEXT or PREVIOUS to scroll through the media size, media type, and level settings for the Front Tray. 2. Press SELECT to view a specific setting.
Tray 1 This submenu allows you to view the current Media Size, Media Type, and Level for Tray 1.	1. Press NEXT or PREVIOUS to scroll through the media size, media type, and level settings for Tray 1. 2. Press SELECT to view a specific setting.
Tray 2 This submenu allows you to view the current Media Size, Media Type, and Level for Tray 2.	1. Press NEXT or PREVIOUS to scroll through the media size, media type, and level settings for Tray 2. 2. Press SELECT to view a specific setting.
Tray 3 This submenu allows you to view the current Media Size, Media Type, and Level for Tray 3.	1. Press NEXT or PREVIOUS to scroll through the media size, media type, and level settings for Tray 3. 2. Press SELECT to view a specific setting.
Face Down Tray This submenu allows you to view the status of the face down tray.	1. Press SELECT to view the status of the Face Down Tray.
Toner Press SELECT to view the status of the toner cartridge.	

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Chapter 4

Maintaining the Printer

In this Chapter . . .

About this Chapter

This chapter provides information about maintaining your printer. Although the printer requires very little maintenance, with normal daily use you will need to perform some routine maintenance procedures, including replacing consumable items and cleaning the printer. This chapter also contains information about moving and storing the printer.

Upgrading Printer Firmware

The executable firmware for the printer controller is stored in FLASH memory. You can easily upgrade this firmware on site when a new version of code is available. The upgrade process involves sending the new code, which is usually named with a .LOD extension, to the printer using either the parallel or network interface. When the printer receives the file, it will automatically recognize it as a firmware upgrade file and will program it into the FLASH memory. During this process the printer will display information about each sub-file that it is receiving or programming. When finished, the printer displays the text "Upgrade Completed" and reboots, executing the new firmware.

Contact your dealer or service provider for more information about firmware upgrades.

Upgrading Firmware Using the Parallel Interface

To upgrade the printer using the parallel interface, go to the DOS prompt and use the copy command to copy the new file to the printer. For example, type "copy newversion.lod/b lpt1" at the DOS prompt, where "newversion" is the name of the firmware upgrade file and "lpt1" is the printer you would like to upgrade. Be sure to use the "/b" switch on the copy command line to ensure that the data is sent in binary mode.

NOTE: If you are using a PC that is not running Windows or if you do not have any printer drivers installed and configured to use the parallel interface, you will need to configure the parallel port for permanent retry by entering the following command PRIOR to entering the copy command discussed above: mode lpt1:,,p

If you are running Windows, you may get an error message during the upgrade process that indicates that the printer is busy or that there is a printer error. This message box will contain check-boxes for "Retry" or "Cancel". DO NOT SELECT CANCEL. This error message is only a result of the printer programming a large file into FLASH memory and will disappear once the programming is completed.

### Upgrading Firmware Using the Network Interface

To upgrade printer firmware using the network interface, simply send the new file to the printer using whatever procedure you normally use to send a print file. This procedure varies depending on the network environment.

Replacing Printer Components

Replacing the Toner Cartridge

The toner cartridge contains the dry ink as well as the xerographic drum and associated components that create the xerographic image on a sheet of paper. The toner cartridge will eventually run out of ink through normal use. When the toner is low, printed images will be uneven or very light. Use the following guidelines when using or storing a toner cartridge:

- An unopened and correctly stored toner cartridge has a shelf life of approximately two years.
- Do not open the box containing the toner cartridge until you are ready to install the cartridge into the printer.
- Store the toner cartridge box horizontally—not on end.
- Keep the cartridge out of the reach of children, and in an area where the temperature remains between 32°F and 95°F and the humidity remains between 15% to 85%. If you bring a cold toner cartridge into a warm room, wait a least an hour for the temperature to stabilize before opening the cartridge box.
- Do not disassemble the toner cartridge.
- Toner is a safe material, but if you get any on your hands DO NOT wash them in hot water. Use only cold water to wash off toner. Hot water sets the toner and makes it difficult to remove.
- A shutter protects the photosensitive drum from ambient light. Do not open the drum shutter by hand.

Drum Shutter
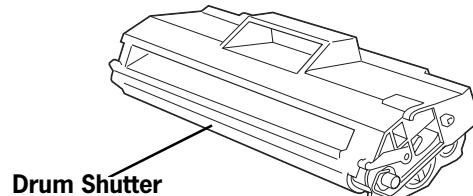
CAUTION: Do not expose the new toner cartridge to strong light for more than a few minutes before installing it into the printer.

WARNING! Do not dispose of used toner cartridges in an incinerator or in an open fire.

Use the following procedure to replace the toner cartridge:

1. Place a drop-cloth or some paper on the table or floor near the printer.

2. Locate the finger grip near the top cover of the printer and pull the top cover up and back to open it.
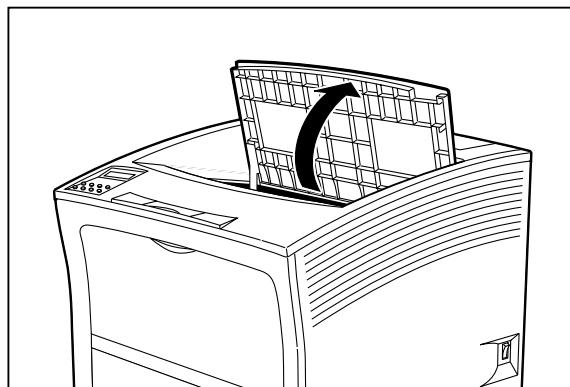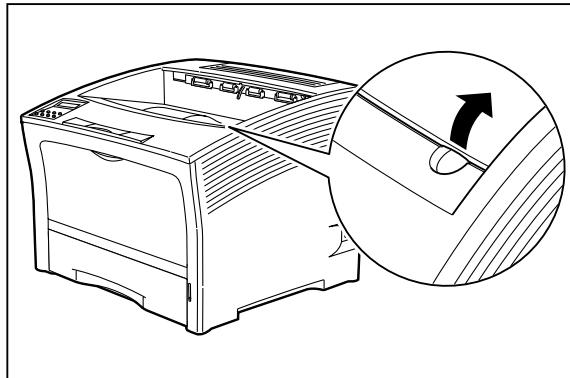
3. Remove the old toner cartridge from the printer and carefully place it on the drop-cloth.
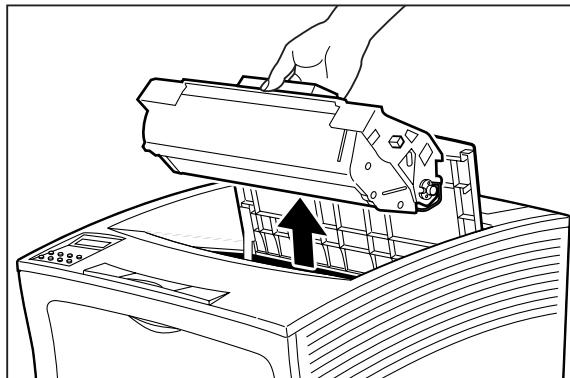
4. Remove the new toner cartridge from its packaging.
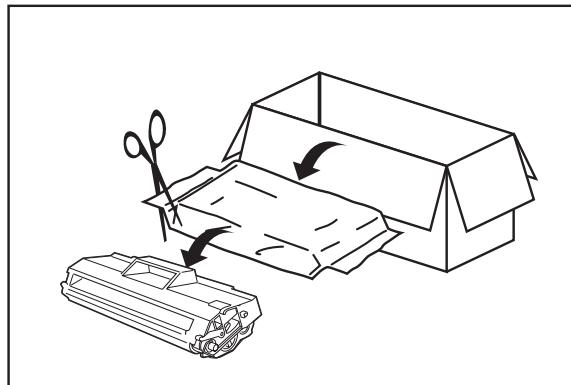
5. Rock the toner cartridge back and forth and then shake it horizontally to ensure that the toner is evenly distributed.
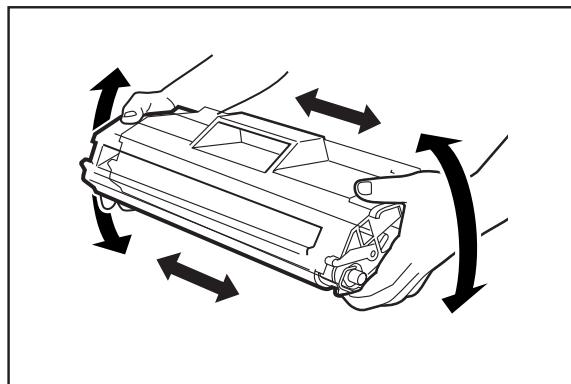

6. Grasp the toner cartridge firmly and pull the sealing tape straight out from the cartridge.
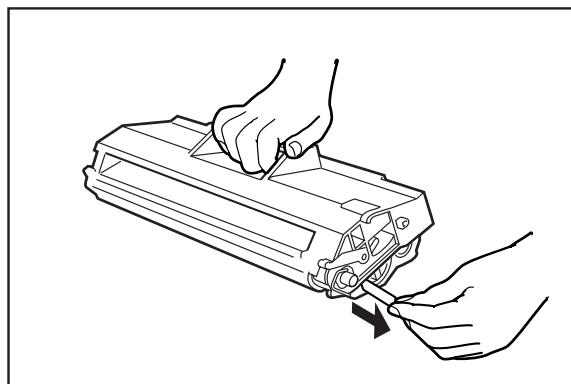
7. Slide the pegs on the toner cartridge into the channels on the inside of the printer, and lower the toner cartridge into the printer.
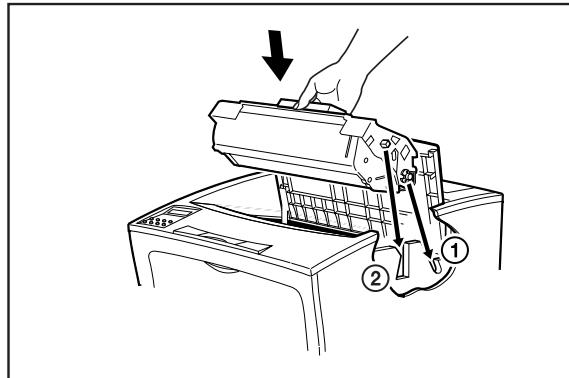
8. Close the top cover.
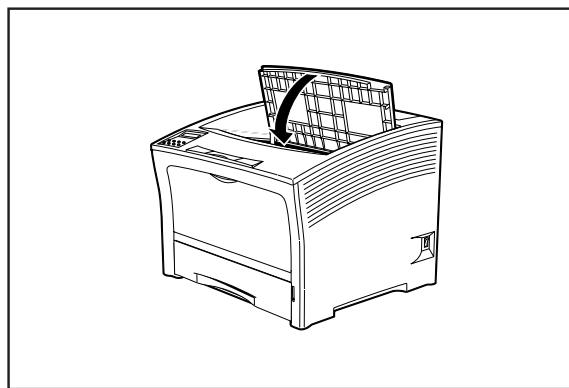
Disposing of the Print Cartridge

1. Place the used toner cartridge inside the new toner cartridge box and seal the box.

2. Dispose of or recycle the used toner cartridge.

WARNING! Do not dispose of the old toner cartridge in an incinerator or in an open fire.

Replacing the Fuser

The fuser melts the toner image into the paper to form a finished print. The fuser wears with normal use and can leave dirt or marks on printed sheets when worn. The normal life of a fuser is approximately 200,000 A4/Letter size prints at 5% area coverage. Running high image density prints or large format paper will cause the fuser life to be shorter.

> **WARNING!** The fuser becomes very hot during operation. Do not touch the fuser until it is cool.

NOTE: In the following procedure, the left and right sides of the printer are those to the left and right of a person facing the rear of the printer.

Use the following procedure to remove and replace the fuser:

1. Turn the printer off by pressing the [O] on the power switch on the right side of the printer, and disconnect the AC power cord from the wall outlet. Wait at least 30 minutes before proceeding to remove the fuser..
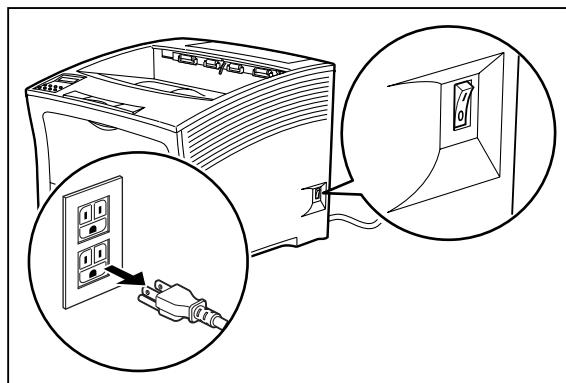
NOTE: If the high capacity stacker is installed, it is not necessary to remove it to replace the fuser; however, removing the stacker will make it easier to access the fuser.

2. Locate the hand grip on the rear of the printer and pull it toward you to open the rear cover.
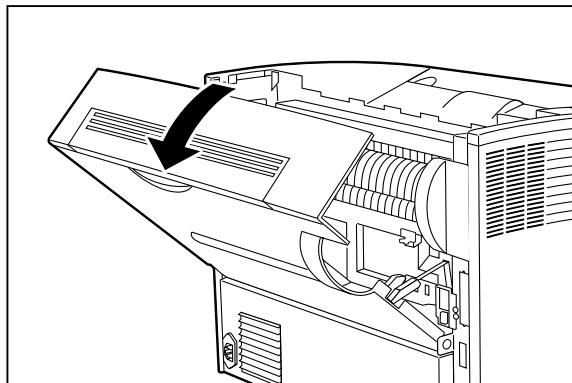
3. Release the fuser by pressing the top of the fuser latch on the left side of the printer.
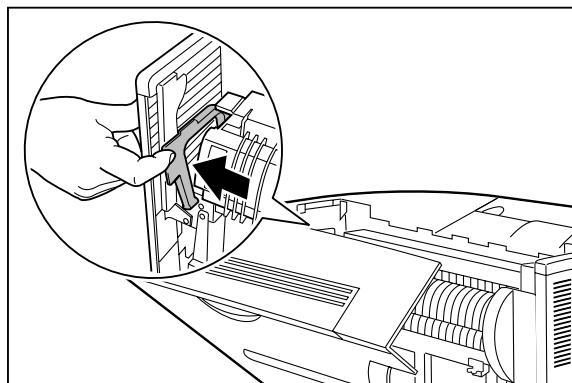

4. Grasp the handles at the ends of the fuser. Lift up on the left end slightly, move the fuser to the left, then lift the fuser straight up and out of the printer.
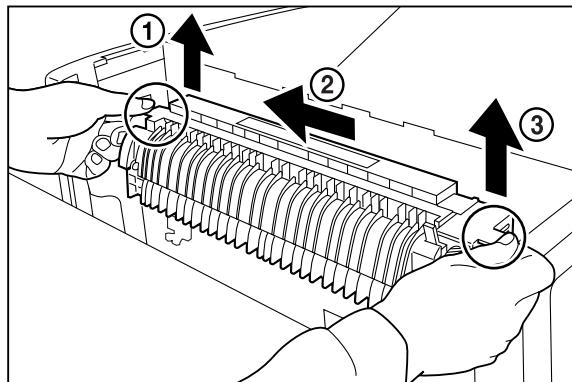
5. Remove the new fuser from its packaging, and remove the fuser shipping spacers by pulling them in the direction shown in the figure below.
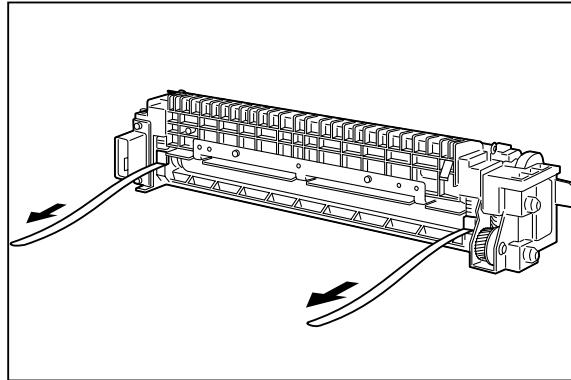
6. Grasp the fuser by the handles. Tilt the right end of the fuser downwards slightly and insert the right end of the fuser under the catch on the right side of the printer frame.
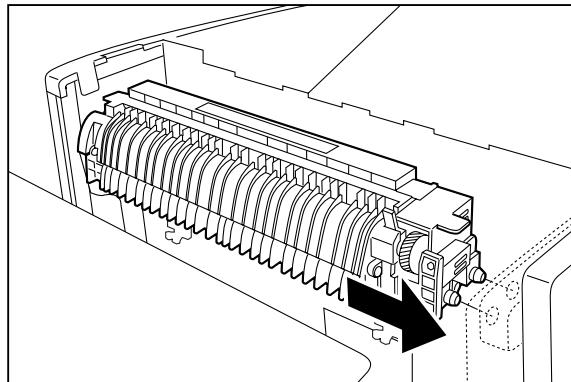
7. Ensure that the fuser pins are properly placed into the holes in the printer frame by lifting up on the right end of the fuser. The fuser should not move.

8. Press down on the left end of the fuser to seat it, then move the top of the fuser latch to the right to lock the fuser into position.
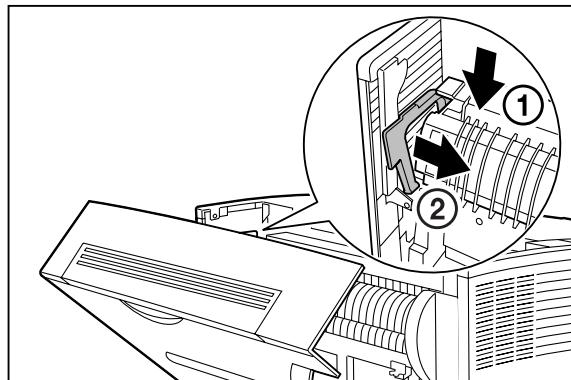
9. Close the rear cover.
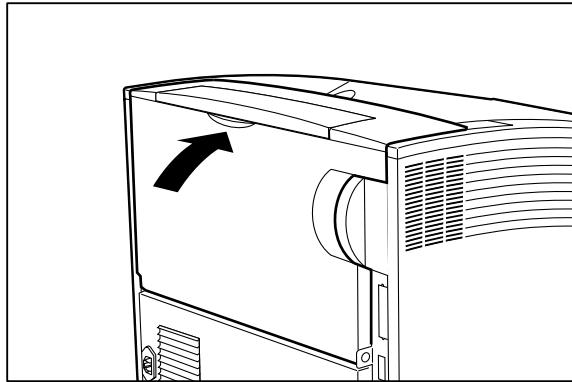
10. Verify that the power switch of the printer is in the [O] (off) position, then insert the plug of the power cord into the AC outlet.
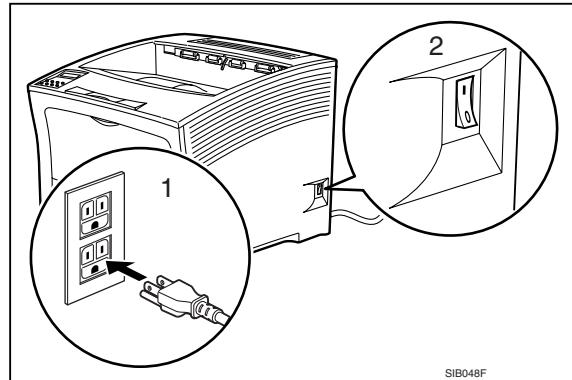
11. Turn the printer on by pressing [I] on the power switch on the right side of the printer.
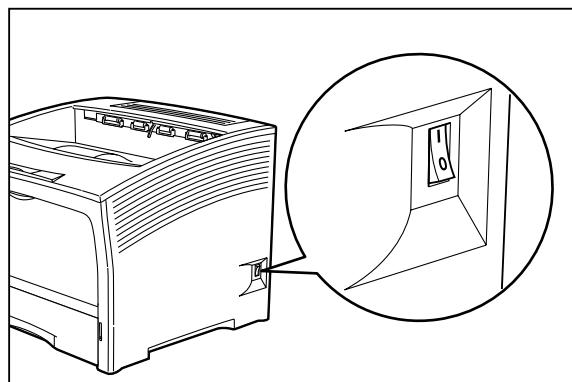

Replacing the Transfer Roll

The transfer roll is the electrically conductive rubber roll that transfers the toner image from the drum onto the paper. The transfer roll wears with normal use, and eventually must be replaced. Use the following procedure to replace the transfer roll:

NOTE: This procedure involves removing the toner cartridge. To avoid getting toner on counters, floors, and other surfaces, set the toner cartridge on a drop-cloth or some old newspaper after removing it from the printer.

1. Turn the printer off by pressing the [O] on the power switch on the right side of the printer.

2. Locate the finger grip on the right side of the top cover and lift the top cover up and back.
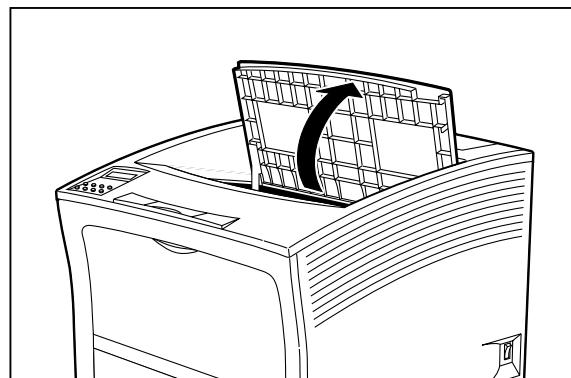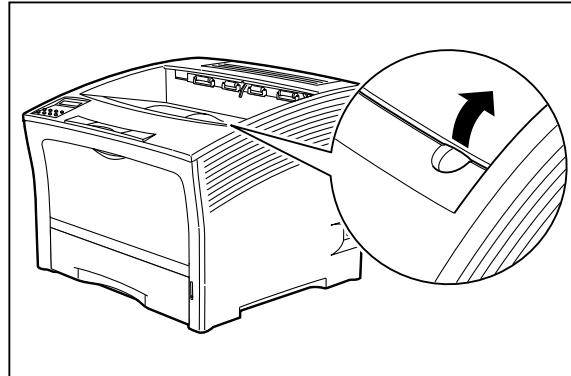

3. Remove the toner cartridge from the printer and carefully place it on a drop-cloth or old newspaper.
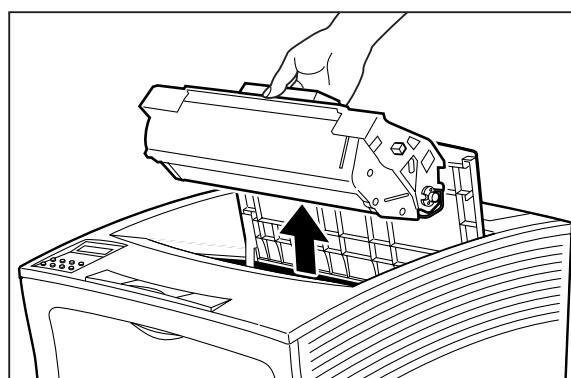
4. Release the transfer roll by lifting up on the latches at either end. Carefully lift the roll out of the clips and remove it from the printer.
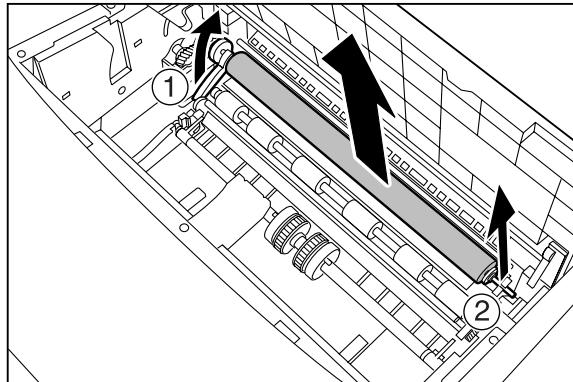

5. Remove the new transfer roll from its packaging and hold it as shown below.
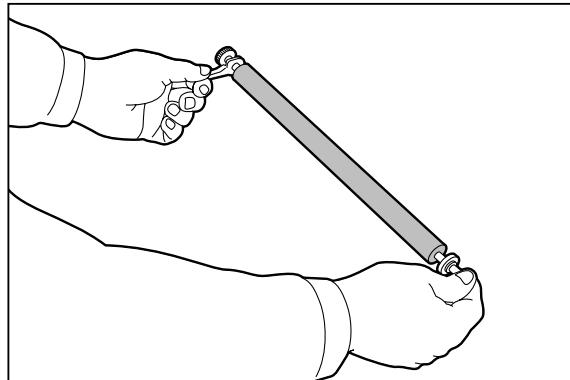

 Do not touch the surface of the new transfer roll. Oil from your fingers can cause marks on printed sheets.

6. Press the ends of the new transfer roll into the clips on the paper transport. Rotate the locking arm down into the locked position.
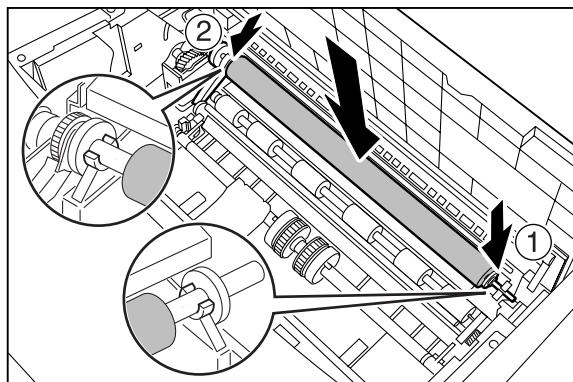
7. Slide the pegs on the end of the toner cartridge into the slots inside the printer, and lower the toner cartridge into the printer.
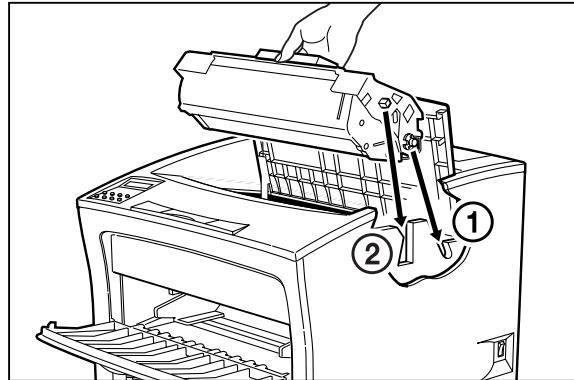
8. Close the top cover.
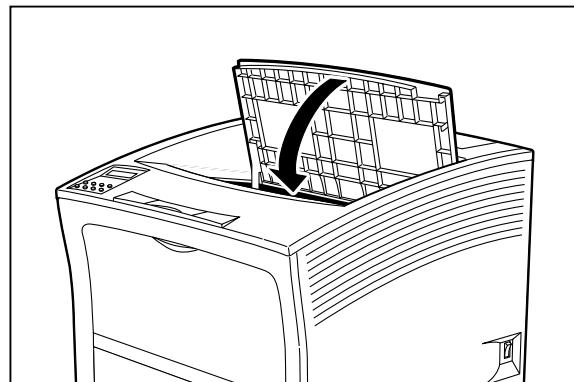
9. Turn the printer on by pressing [I] on the power switch on the right side of the printer.
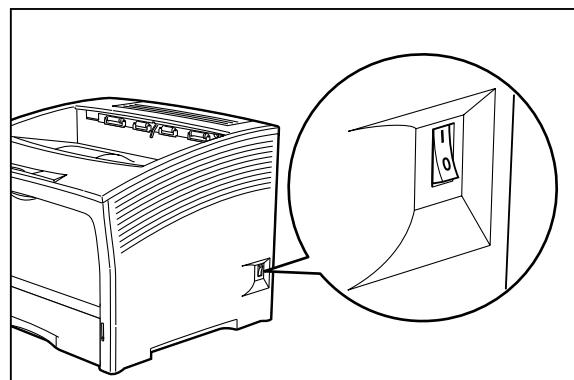
Cleaning the Printer

Cleaning the Exterior

The covers and tray faces of the printer may collect dust and dirt through normal use. Although exterior dirt should not affect printer performance, an occasional exterior cleaning helps maintain the appearance of the printer appearance. Use the following procedure to clean the exterior of the printer:

1. Turn the printer off by pressing the [O] on the power switch on the right side of the printer, and disconnect the AC power cord from the wall outlet.
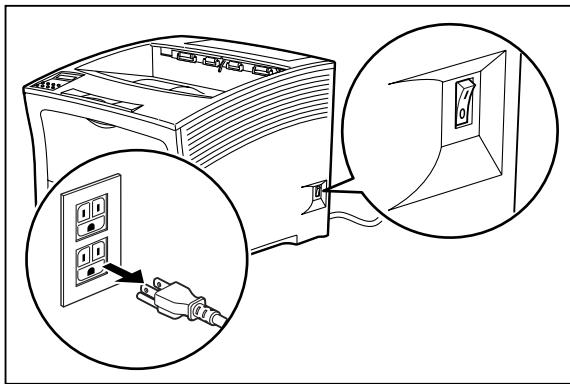
2. Using a soft cloth that is slightly damp with cold water, wipe the printer covers and tray faces. Use a very mild, non-abrasive soap to remove heavy dirt and toner stains.U
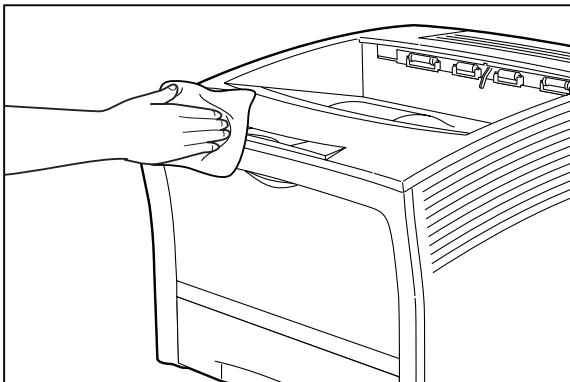
Do not use solvents or abrasive cleaners to clean printer covers. Use only cold water and a very mild soap.

3. Use a soft, dry cloth to thoroughly dry the covers and tray faces.

4. Verify that the power switch of the printer is in the [O] (off) position, then insert the plug of the power cord into the AC outlet.
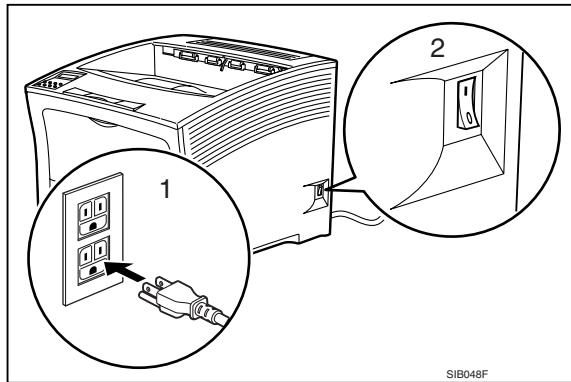
5. Turn the printer on by pressing [I] on the power switch on the right side of the printer.
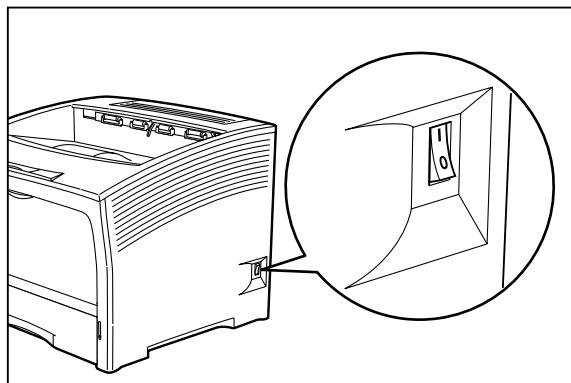

Cleaning the Interior

The interior of the printer does not generally need to be cleaned unless a paper jam drops toner onto the paper path or you accidentally spill toner inside the printer when installing a new toner cartridge. Use the following procedure to clean the interior of the printer only when necessary:

> ⚠️ Since there is always the possibility of damaging delicate printer components by carelessness or vigorous cleaning methods, Compuprint recommends that you clean the interior only when you are instructed to do so by a service representative or in a troubleshooting procedure presented in this manual.

NOTE: This procedure involves removing the toner cartridge. To avoid getting toner on counters, floors, and other surfaces, set the toner cartridge on a drop-cloth or some old newspaper after removing it from the printer.

1. Turn the printer off by pressing the [O] on the power switch on the right side of the printer, and disconnect the AC power cord from the wall outlet.
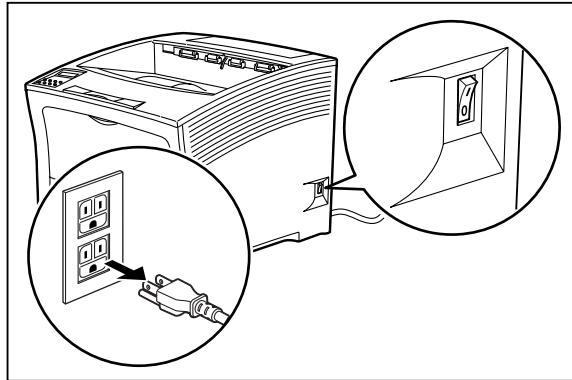
2. Remove all of the paper from the main paper tray and from the front paper tray.

3. Locate the finger grip on the right side of the top cover and lift the top cover up and back.
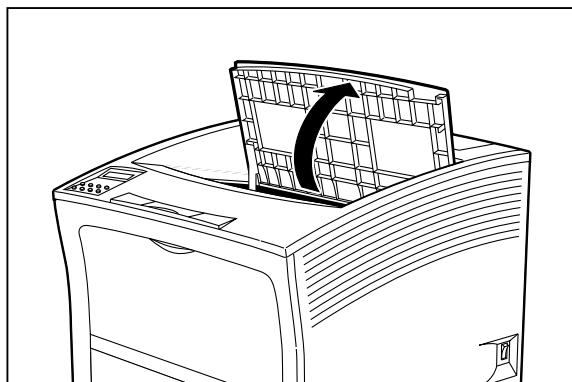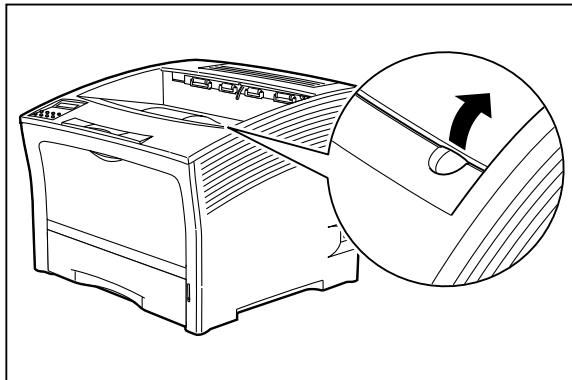
4. Remove the toner cartridge from the printer and carefully place it on a drop-cloth or old newspaper.
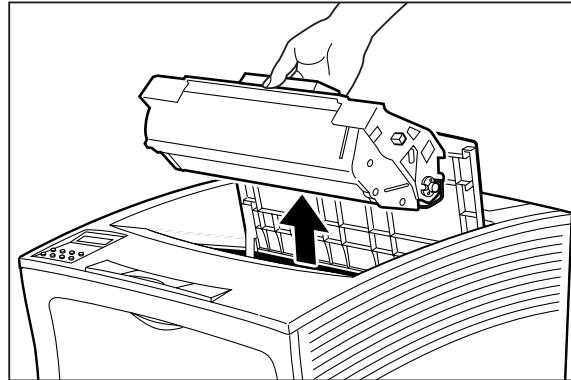
5. Open all printer doors.
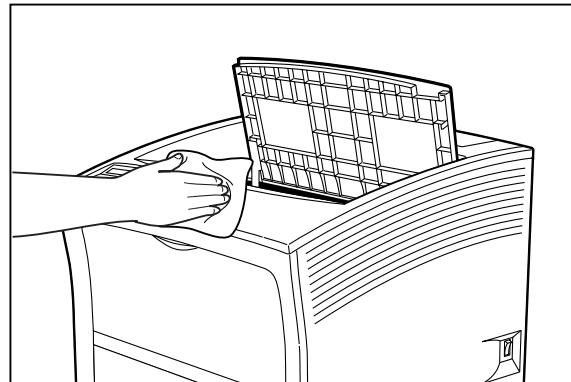
6. For minor cleaning, use a soft, dry cloth and carefully wipe only those areas of the printer interior that appear to be dirty.

   For major cleaning, use a small vacuum cleaner with a disposable bag and crevice tool attachment. Use a soft-haired brush to dislodge dirt and toner and sweep it into the vacuum nozzle.

7. Wipe the laser scanner window with a soft lint free cloth.
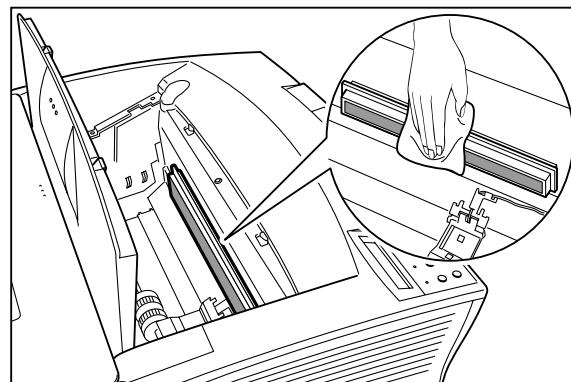
8. Slide the pegs on the end of the toner cartridge into the slots inside the printer, and lower the toner cartridge into the printer.
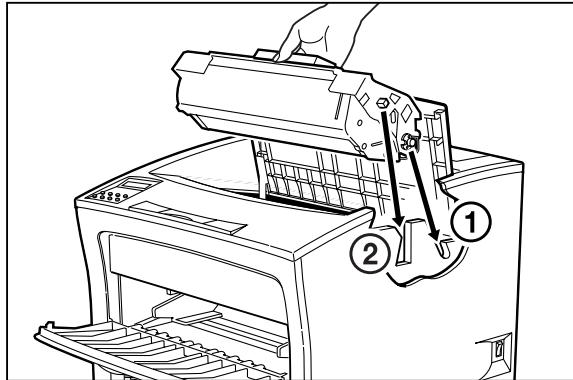
9. Close the top cover.
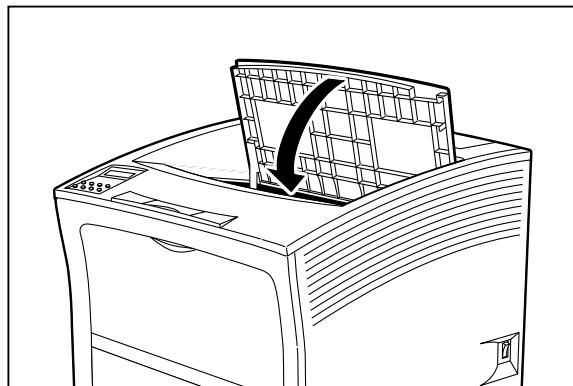
10. Reload all paper into the main paper tray and the front paper tray.

11. Verify that the power switch of the printer is in the [O] (off) position, then insert the plug of the power cord into the AC outlet.
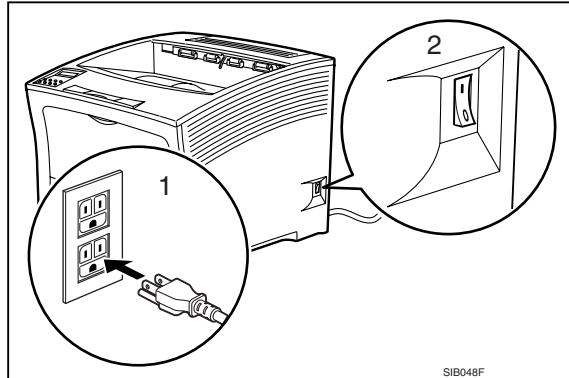
12. Turn the printer on by pressing [I] on the power switch on the right side of the printer.
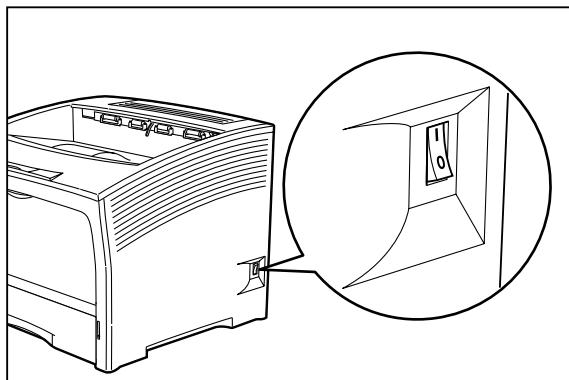
Cleaning Feed Rolls

Rubber feed rolls drive sheets of paper out of the front paper tray into the printer, and also drive sheets of paper out of the main paper tray into the printer. These feed rolls wear with normal use and eventually become coated with paper dust and must be cleaned. Frequent feed jams in the front tray or main tray indicate that the feed rolls need to be cleaned.

Main Feed Roll

Use the following procedure to clean the main feed roll:

1. Turn the printer off by pressing the [O] on the power switch on the right side of the printer, and disconnect the AC power cord from the wall outlet.
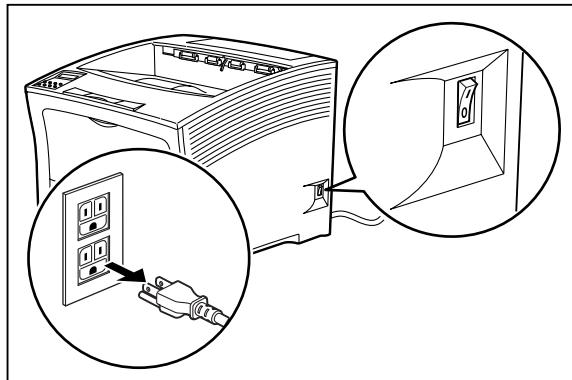
2. Remove the main paper tray and set it on a flat level surface.
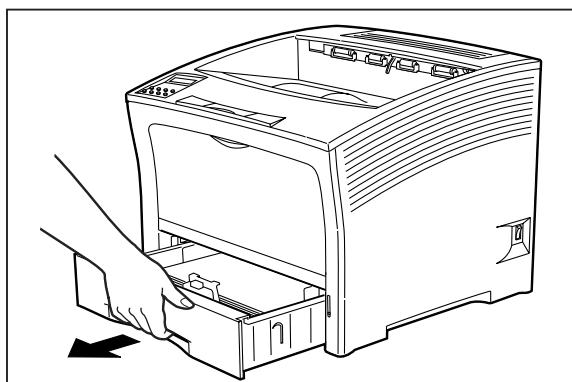
3. Open the front paper tray and pull the front feeder partially out of the printer.
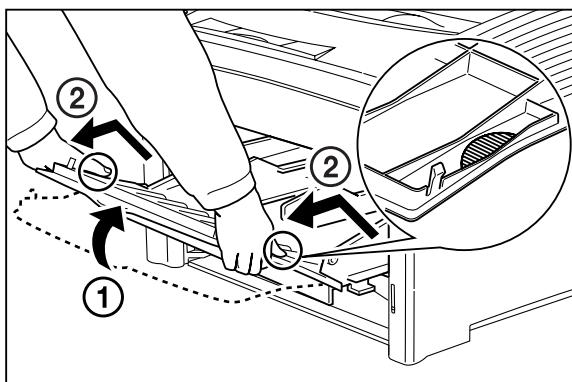
4. Reach into the main paper tray well and rotate the feed roll to the down position, as shown in the figure below.
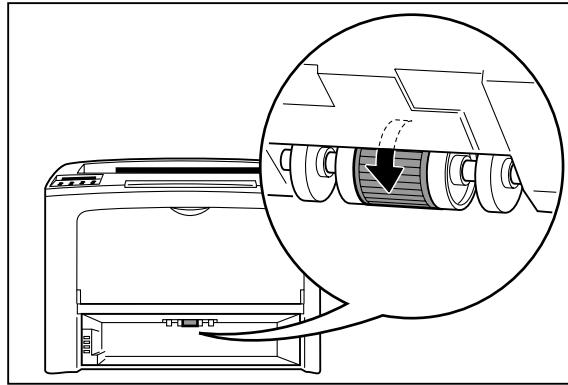
5. Using a soft cloth slightly moistened with plain water, carefully wipe the feed roll.

6. Rotate the feed roll back into the feed position.
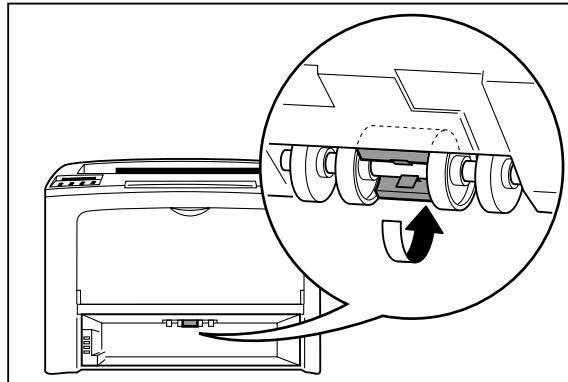
7. Reinstall the front paper tray.
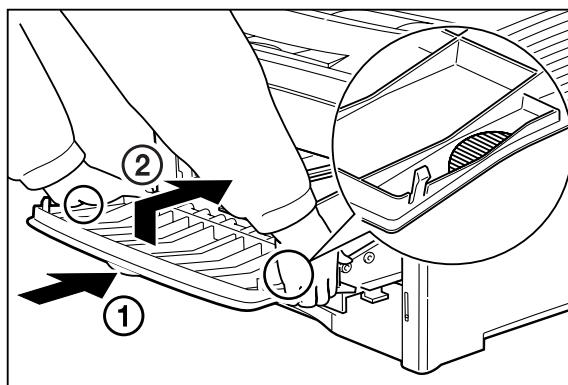
8. Reinstall the main paper tray.
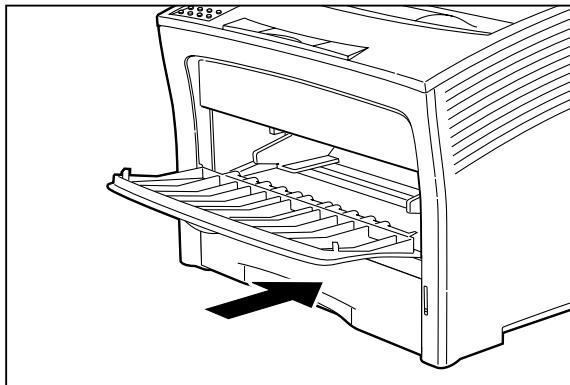
9. Verify that the power switch of the printer is in the [O] (off) position, then insert the plug of the power cord into the AC outlet.
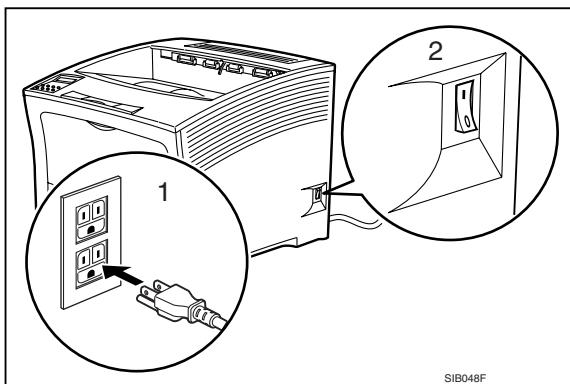
10. Turn the printer on by pressing [I] on the power switch on the right side of the printer.
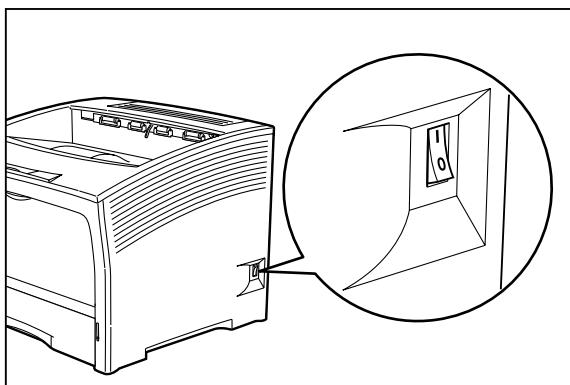

Front Feed Rolls

Use the following procedure to clean the front feed rolls:

> **NOTE:** This procedure involves removing the toner cartridge. To avoid getting toner on counters, floors, and other surfaces, set the toner cartridge on a drop-cloth or some old newspaper after removing it from the printer.

1. Turn the printer off by pressing the [O] on the power switch on the right side of the printer, and disconnect the AC power cord from the wall outlet.
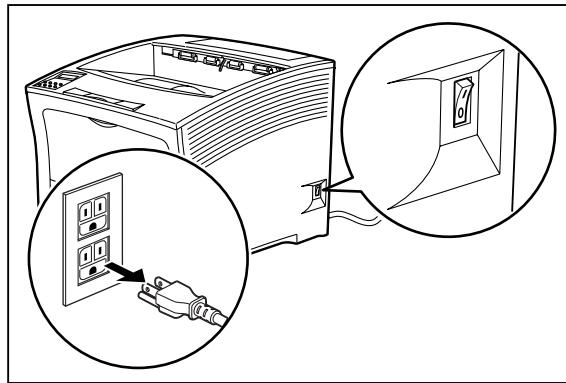

2. Locate the finger grip on the right side of the top cover and lift the top cover up and back.
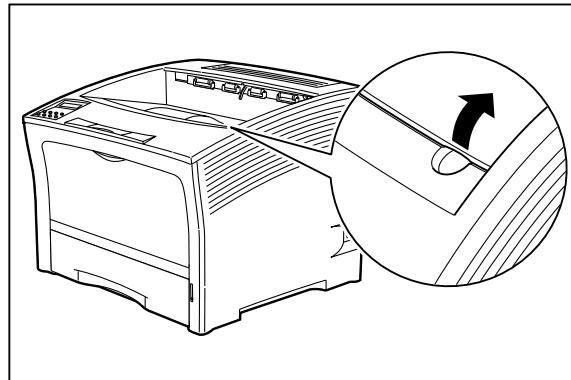
3. Remove the toner cartridge from the printer and carefully place it on a drop-cloth or old newspaper.
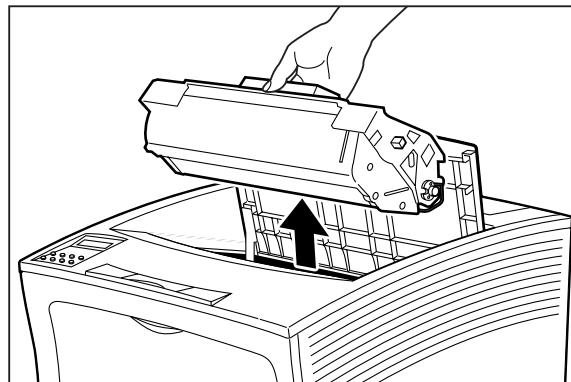
4. Look inside the empty toner cartridge cavity and locate the D shaped rubber front tray feed rolls and the white plastic rolls next to them.
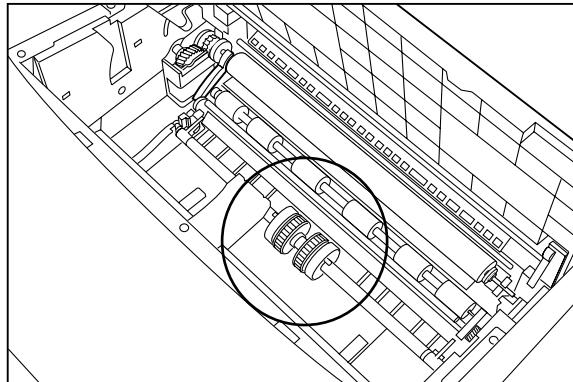
5. Using a soft cloth slightly moistened with plain water, carefully wipe the feed rolls.

6. Slide the pegs on the end of the toner cartridge into the slots inside the printer, and lower the toner cartridge into the printer.
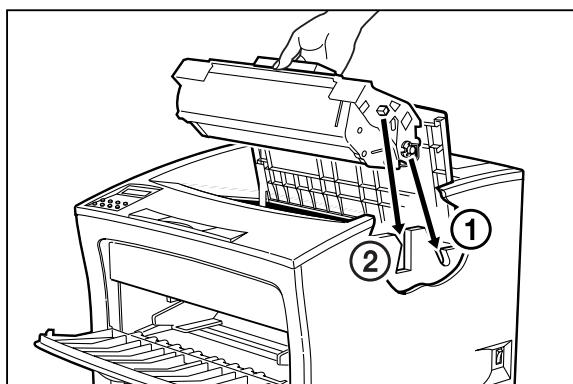
7. Close the top cover.
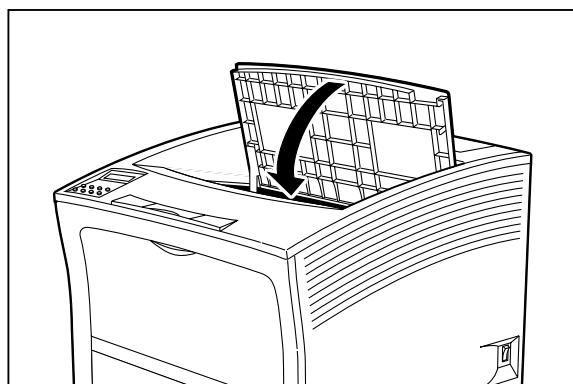
8. Verify that the power switch of the printer is in the [O] (off) position, then insert the plug of the power cord into the AC outlet.
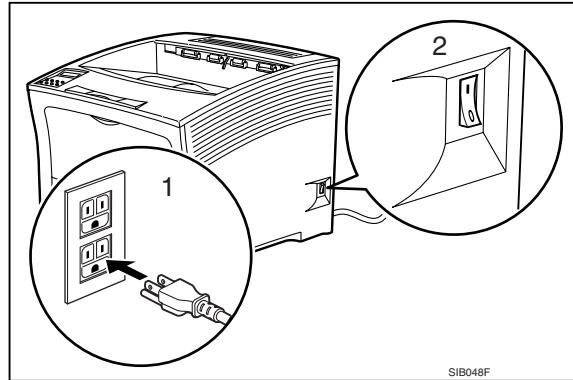
9. Turn the printer on by pressing [I] on the power switch on the right side of the printer.
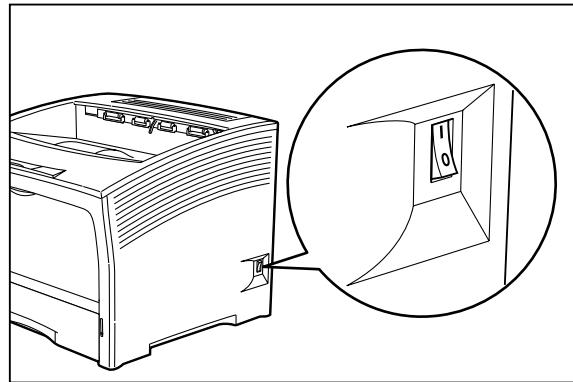
Moving the Printer

Follow the guidelines below when lifting or moving the printer:

- The printer is very heavy, and should always be lifted by two people. The weight of the printer without paper tray, toner cartridge, and paper is about 55 lbs (25 kg). Never attempt to lift the printer alone.
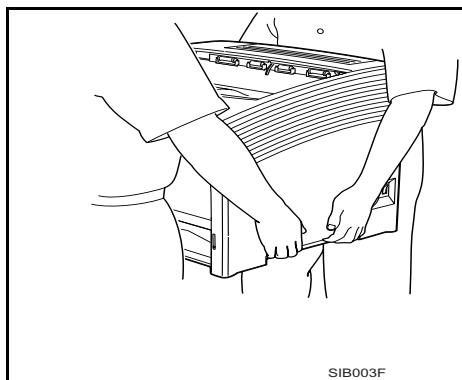
- To lift the printer, have two individuals facing each other from the front and the rear of the printer grasp the recessed areas on each side of the printer. Do not lift the printer by grasping any area other than these recessed areas.
- When lifting the printer, maintain proper lifting posture to prevent injuries.

Moving the Printer a Short Distance

Use the following procedure to move the printer a short distance:

1. Turn the printer off by pressing the [O] on the power switch on the back of the printer.
2. Unplug the AC power cord from the AC wall outlet.
3. Disconnect the printer from the host computer.
4. Wait 30 minutes for the printer to cool.
5. Refer to Chapters 6 through 9 for instructions on moving installed paper-handling options.
6. Remove the toner cartridge and cover it with an opaque plastic sheet.
7. If the printer or the table the printer is on has casters, unlock the casters.
8. Move the printer to the new location.
9. Once the printer is in the new location, refer to the **Installation Guide** included in the original printer packaging for installation instructions.

Moving the Printer a Long Distance

Use the following procedure to move the printer a long distance:

1. Turn the printer off by pressing the [O] on the power switch on the right side of the printer.
2. Unplug the AC power cord from the wall outlet and from the back of the printer.
3. Disconnect the printer from the host computer.
4. Remove the paper from all of the paper trays.

5. Wait 30 minutes for the printer to cool.

6. Remove all installed paper-handling options. Refer to Chapters 6 through 9 for instructions for removing installed paper-handling options.

7. Remove the toner cartridge and place it in an opaque plastic bag, then seal the bag with tape and place it in a sturdy box.

8. Repack the printer, paper trays, AC power cord and toner cartridge into the original shipping box or boxes.

9. Once the printer is in the new location, refer to the **Installation Guide** included in the original printer packaging for installation instructions.

Storing the Printer for Long Periods of Time

If you will not be using the printer for several months, use the following procedure to prepare the printer for storage:

1. Turn the printer off by pressing the [O] on the power switch on the right side of the printer.

2. Unplug the AC power cord from the AC wall outlet.

3. Disconnect the printer from the host computer.

4. Remove the paper from all of the paper trays.

5. If you will be storing the printer for six months or longer, remove the toner cartridge and place it in an opaque plastic bag, and seal the bag with tape.

NOTE: After prolonged inactivity the toner cartridge may degrade to the point where it is no longer usable and must be replaced. Poor print quality and frequent paper jams may indicate that the toner has solidified and that the drum has oxidized during storage.

6. Cover the printer with a plastic sheet and tape down the corners.

7. Store the printer in an area where the temperature and humidity are moderate, as described in "Environment Requirements" on page 1-4.

NOTE: Do not stack other items on top of the printer when storing the printer.

◆　◆　◆

Chapter 5

Troubleshooting

In this Chapter . . .

About this Chapter

This chapter describes the problems that you may encounter when using your printer, and provides procedures for resolving the problems. This chapter also lists the warning and error messages that appear on the control panel display.

There are four basic types of printer problems:

- Installation problems

  If there is a problem with the printer when you first turn in on, refer to "Installation Problems" on page 5-2 for information about possible installation problems.

- Paper Jams

  If there is a paper jam, refer to "Paper Jams" on page 5-4 for procedures to remove the jam.

- Print quality problems

  If the finished prints delivered to the output tray display image problems such as image black spots or vertical lines on the page, refer to "Print Image Quality Problems" on page 5-27 and complete the procedure provided for the specific image problem that you have encountered.

- Miscellaneous problems

  If you have a printer problem but the control panel does not display a warning message or error message, refer to "Miscellaneous Problems" on page 5-35 and follow the directions for correcting that problem.

Many of these printer problems are indicated by a warning or error message appearing on the control panel display. If the printer control panel displays a warning message or error message, refer to "Warning Messages and Error Messages" on page 5-39 and complete the actions prescribed for the specific warning or error message.

Installation Problems

It is common for simple oversights during printer installation to cause problems when you first turn the printer on, resulting in noise, smoke, or smell; an inoperative printer; or the absence of a ready message on the control panel.

Inoperative Printer

If you have problems turning on the printer, check the possible causes listed in the table below. If the printer will not start after checking these items, turn the printer off, disconnect the power cord from the AC outlet, and contact your dealer or an authorized service provider.

Description	Possible Cause	Action
There is no power.	The power switch is not set to [I] (on).	Check the power switch. See "Step 7: Connecting the Power Cord and Turning the Printer On" on page 2-15. of the Installation Guide.
	The power cord is not properly plugged into an AC outlet or into the AC connector on the rear of the printer.	Set the power switch to [O] (off) and then connect the power cord firmly to the AC connector and to the AC outlet. See "Step 7: Connecting the Power Cord and Turning the Printer On" on page 2-15. of the Installation Guide.
	Voltage of the AC power is not correct.	Verify that the AC outlet is rated for the voltage of your printer. See "Connecting the Printer to the AC Outlet" on page 2-2. of this guide.
	The fuse on the power cord is not functioning. (UK only)	Verify that the fuse on the power cord is intact. (UK only)
	The AC wall outlet is not functioning.	Verify that voltage is present at the AC wall outlet by connecting another electrical device to the outlet. If power does not flow to the other device, check the AC wall outlet circuit breakers for a tripped breaker.
	There is interference from other electrical devices on the same circuit.	Unplug all electrical devices from the AC wall outlet circuit, and then reconnect only the printer. Turn printer power on.
	Thermal sensors may have shut down the printer.	Turn the printer off and wait 20 minutes, then turn the printer back on.
Power is frequently interrupted.	The printer is malfunctioning.	Turn the printer off and disconnect the power cord from the AC outlet. Contact your dealer or an authorized service provider.

No Ready Message

After warming up, the printer control panel displays the text "**Ready**", indicating that the printer is ready to print. If the printer does not show this message, but shows an error message instead, refer to "Warning Messages and Error Messages" on page 5-39 to determine the appropriate action for the specific error message that is shown. If the printer does not display either the "**Ready**" message or an error message, contact your retailer or sales representative.

Noise, Smoke, or Smell

If you notice unusual noise, smoke, or smell after turning the printer on, *turn the printer off immediately and disconnect it from the AC wall outlet*. Use the following procedure to determine the cause of and alleviate the problem:

1. Refer to the pictorial unpacking sheet and the Installation Guide included in the printer packaging and make sure you have removed all shipping spacers and protective tape from the inside of the printer, the paper trays, and the toner cartridge.

2. Open the covers on the printer and carefully inspect the fuser area. Remove any pieces of paper that may be stuck in the fuser.

3. Check the inside of the printer for any obviously broken or detached parts. If you find a broken part, contact your retailer or sales representative.

4. Check the exterior of the printer for broken covers. If you find a broken cover, contact your retailer or sales representative.

5. Verify that the AC wall outlet is the correct voltage for your printer.

6. Remove any paper you have loaded in the main tray, check the inside of the tray well for stray sheets of paper, and reload the paper into the main tray.

7. Connect the printer to the AC wall outlet and turn the printer on by pressing the [I] on the power switch on the right side of the printer.

8. If this procedure does not eliminate the noise, smoke or smell, or if the problem returns, turn the printer off, unplug the AC power cord from the AC wall outlet, and contact your retailer or sales representative.

Paper Jams

Paper jams are generally the most common and reoccurring problem encountered when using any printer. Paper may jam anywhere along the paper path—from the paper tray to the output tray. Sensors within the printer constantly monitor paper travel, so when a sheet of paper fails to arrive at a certain point within a specific time, the printer interprets that to mean that the paper has stopped between two sensors along the paper path. The printer then displays a Paper Jam error message that corresponds to that specific jam.

When paper gets jammed inside the printer, printing stops and an error code indicating the position of the jam appears on the display.

Error Code	Paper Jam Location
E0	At the high capacity feeder
E1	At the regi sensor
E2-X	Between the paper feed section (front paper tray or main tray) and the toner cartridge
E3	Between the toner cartridge and the fuser unit
E4	At the paper exit slot
E7	At the duplexer
E8	At the offset output tray
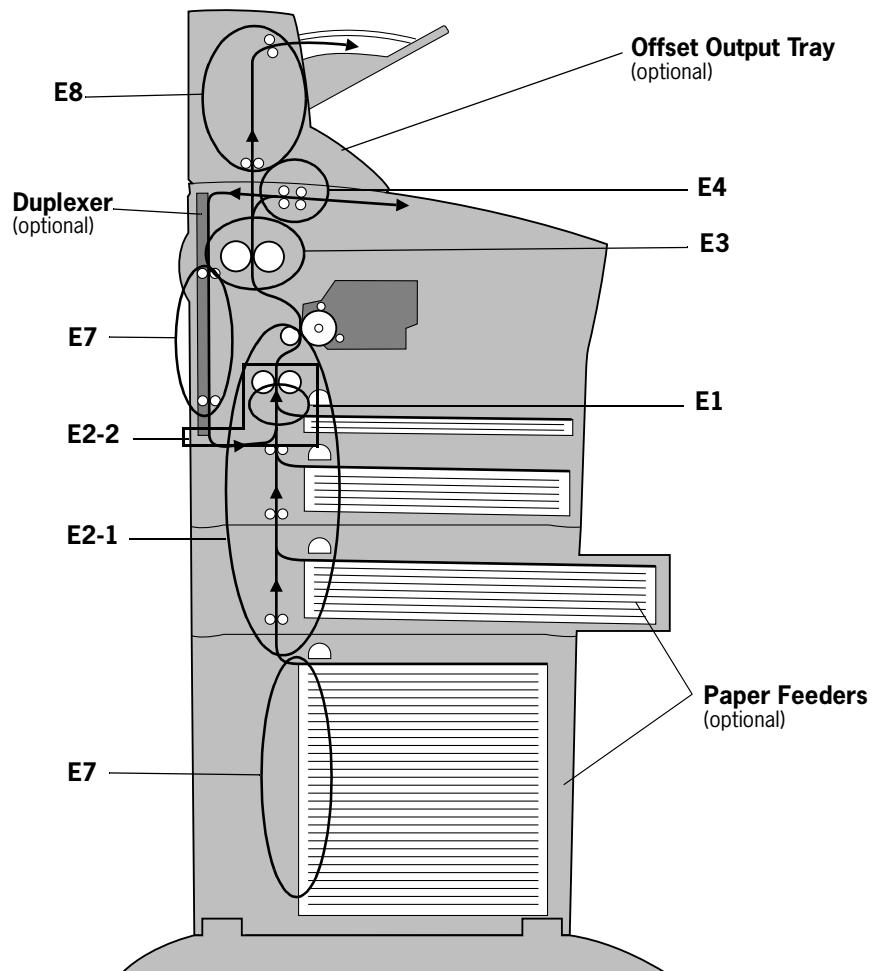
Figure 3-1: Paper Jam Locations and Error Codes.

The most common causes of paper jams are:

- The printer is not placed on a level surface.
- The print media does not conform to the specifications.
- The paper is not loaded correctly in the front paper tray or the cassette.
- The paper is wrinkled or curled.
- The paper guide is not set correctly.

Occasional paper jams result from simple things such as static electricity sticking paper together—causing several sheets to feed at the same time—or from the feed rolls becoming slippery from an accumulation of paper dust. Occasional paper jams usually require minor user intervention that involves reloading the paper or cleaning the feed rolls.

Frequent paper jams can be caused by anything from foreign material in the paper path to a broken or malfunctioning component. Frequent paper jams may require involved user intervention that includes replacing a consumable item or calling a service technician to troubleshoot and correct the problem.

Clearing an E1, E2-1 or E2-2 Paper Jam

If an E1, E2-1 or E2-2 error code precedes the error message on the first line of the control panel display, paper has jammed somewhere between the feed area and the registration sensor. Use the following procedure to clear a paper jam in this location:

1. Remove any printed pages from the output tray.
2. Open the top cover and the front tray cover.

3. If the jam occurred while feeding from the front paper tray, remove all paper from the front tray, including any paper that may be jammed inside the tray.

4. If the jam occurred while feeding from the main paper tray, remove the main paper tray.

5. Remove any jammed or wrinkled paper from the paper tray.

6. Remove any jammed paper from the inside of the paper tray well.

7. If the jam occurred while feeding from Tray 2 or 3, remove the paper tray associated with that feeder and inspect the inside of the paper tray well, removing any jammed paper.

8. Open the rear door of the feeder for tray 2 or tray 3 and remove any jammed paper, then close the rear door of the feeder

9. Remove the front tray by lifting up slightly and pulling the tray out from the printer.

10. Remove the toner cartridge.

11. Remove any jammed paper from the toner cartridge well.

12. Reinsert the front tray into the printer.
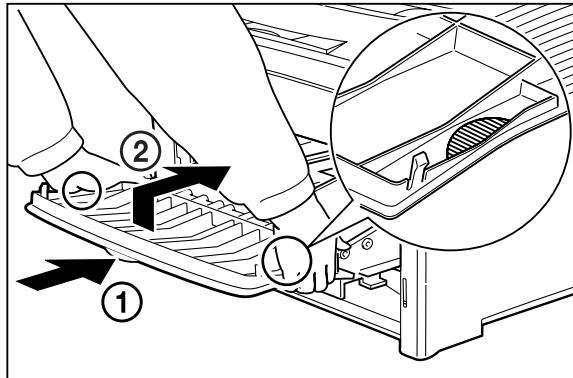
13. Reload any paper into the front tray.
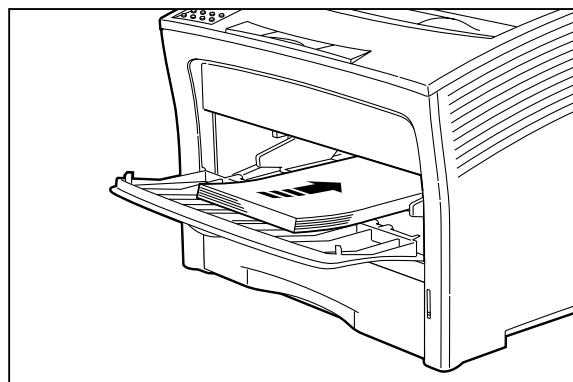
14. Close the front tray cover.
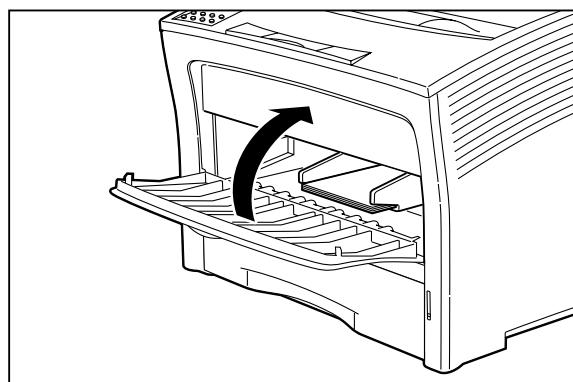
15. Slide the pegs on the toner cartridge into the channels on the inside of the printer, and lower the toner cartridge into the printer.
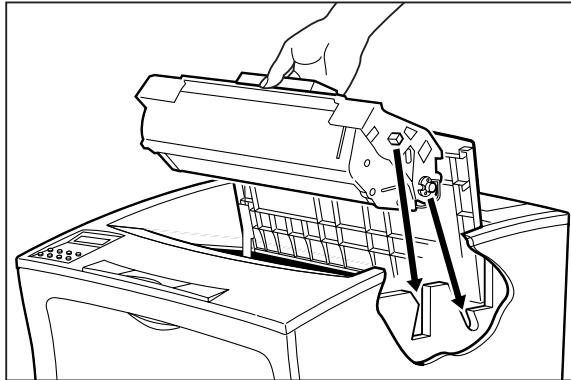
16. Reinstall the main paper tray.
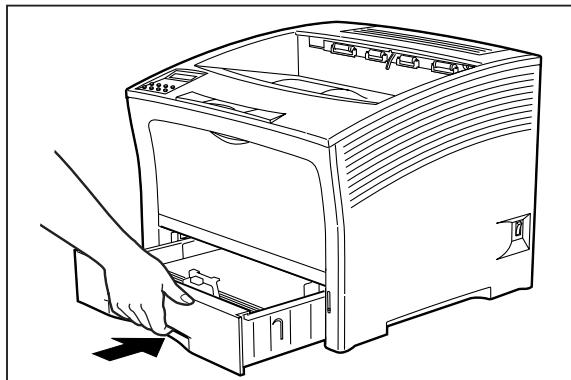
17. If you removed either tray 2 or tray 3, reinstall it.
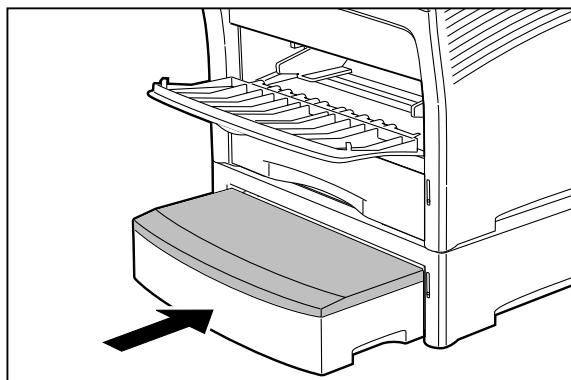
18. Close the Top Cover.
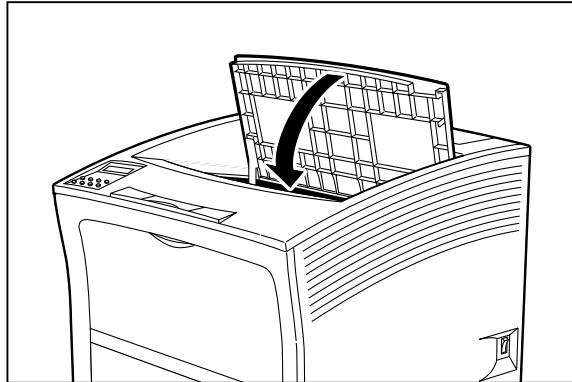
## Clearing an E3 or E4 Jam

If an E3 or E4 error code precedes the error message on the first line of the control panel display, paper has jammed somewhere between the registration sensor and the exit sensor. Use the following procedure to clear a paper jam in this location:

1. Remove any printed pages from the output tray.

2. Open the top cover and the front tray cover.

3. If the jam occurred while feeding from the front paper tray, remove all paper from the front tray, including any paper that may be jammed inside the tray.

4. If the jam occurred while feeding from the main paper tray, remove the main paper tray.

5. Remove any jammed or wrinkled paper from the paper tray.


6. Remove any jammed paper from the inside of the paper tray well.

7. If the jam occurred while feeding from Tray 2 or 3, remove the paper tray associated with that feeder and inspect the inside of the paper tray well, removing any jammed paper.

8. Open the rear door of the feeder for Tray 2 or 3 and remove any jammed paper, then close the rear door of the feeder
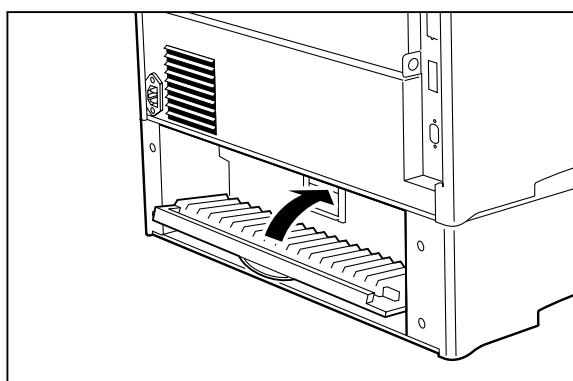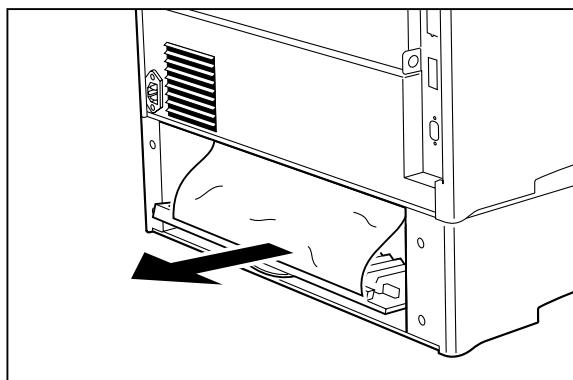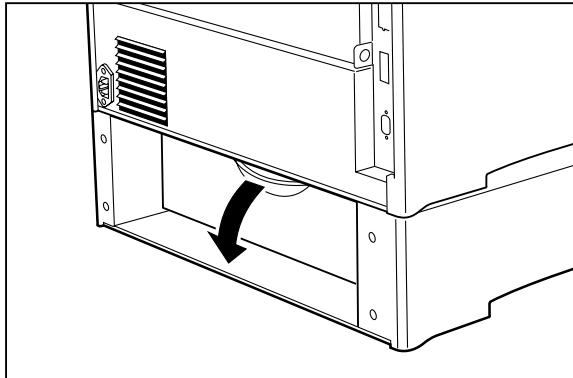
9. Remove the front tray by lifting up slightly and pulling the tray out from the printer.
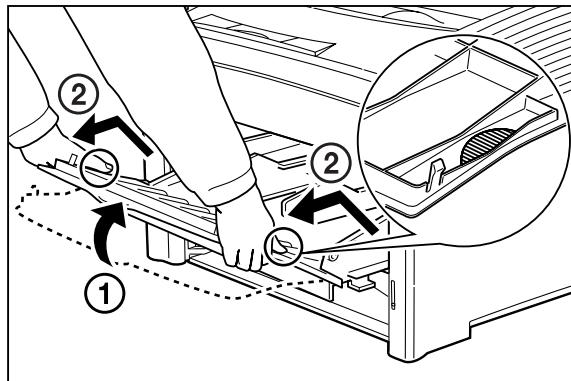
10. Remove the toner cartridge.
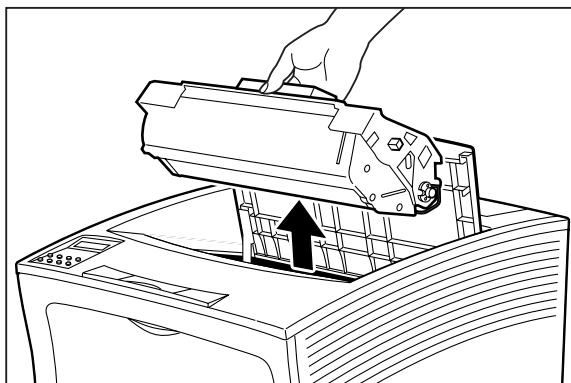
11. Remove any jammed paper from the toner cartridge well.
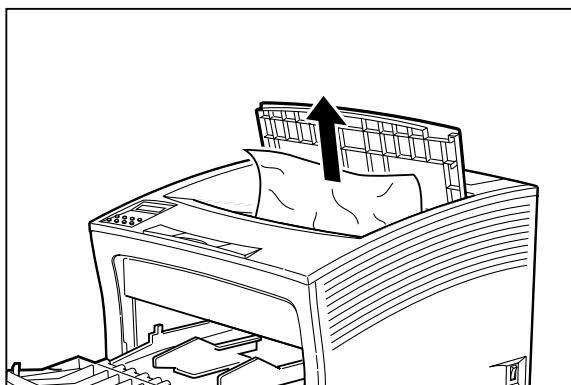
NOTE: At this point you must wait at least 10 minutes before proceeding to clear jammed paper from the fuser. This time is required to allow the fuser to cool.

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12. Locate the hand grip on the rear of the printer and pull it to open the rear cover of the printer.
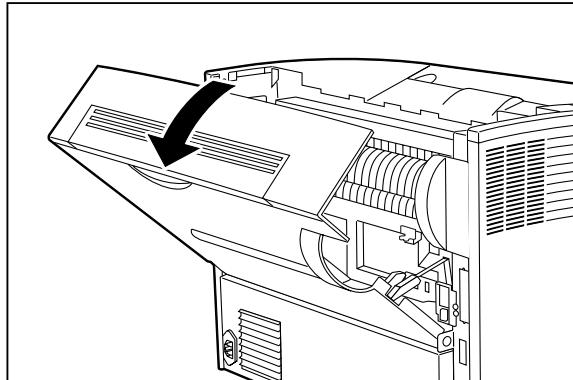
13. Open the fuser transport by pulling down on the spring loaded lever (1). Remove any jammed paper from the fuser (2). Make sure you do not to tear the paper, leaving pieces stuck in the fuser.
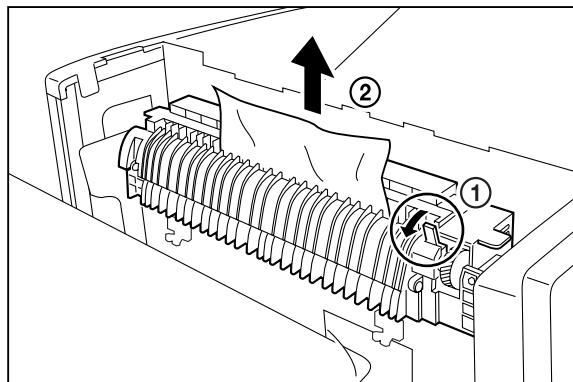
14. Allow the fuser transport to close, and close the rear cover.
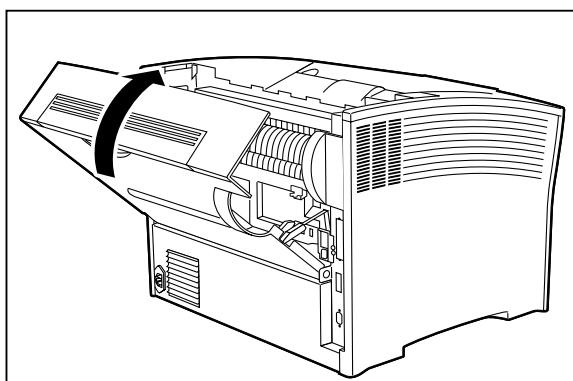
15. Reinsert the front tray into the printer.
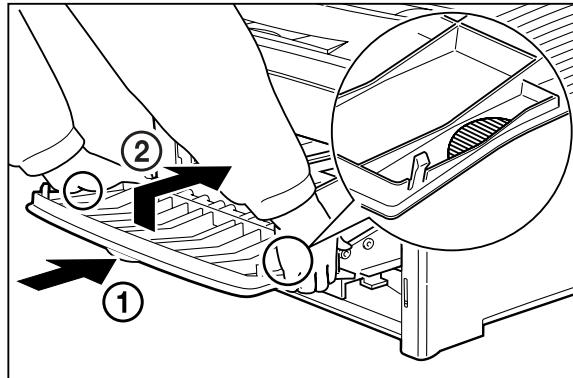
16. Reload any paper into the front tray.
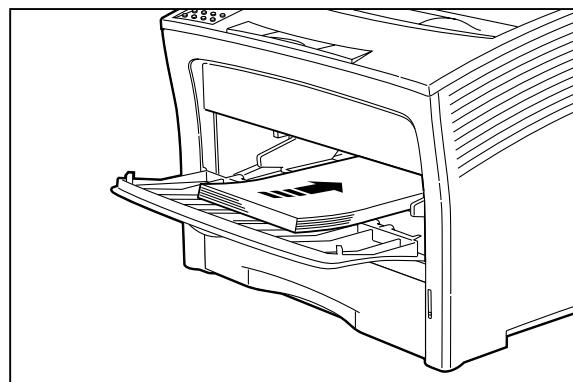
17. Close the front tray cover.
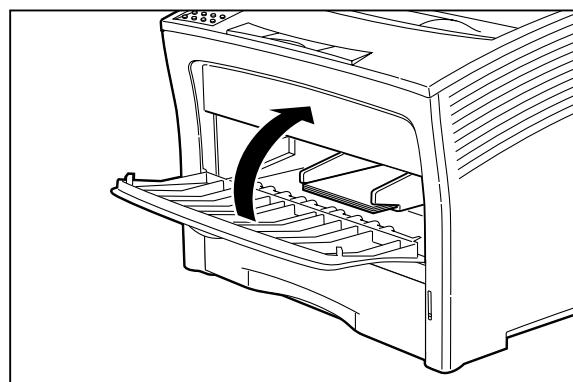
18. Slide the pegs on the toner cartridge into the channels on the inside of the printer, and lower the toner cartridge into the printer.
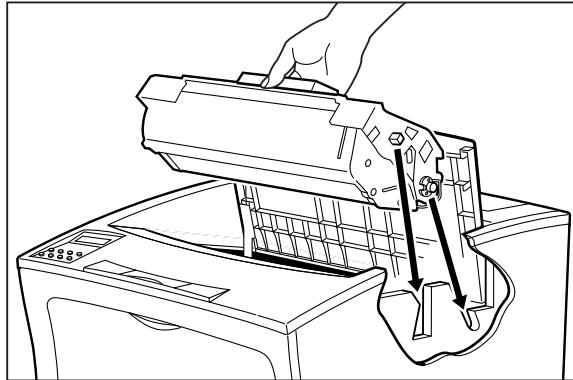
19. Reinstall the main paper tray.
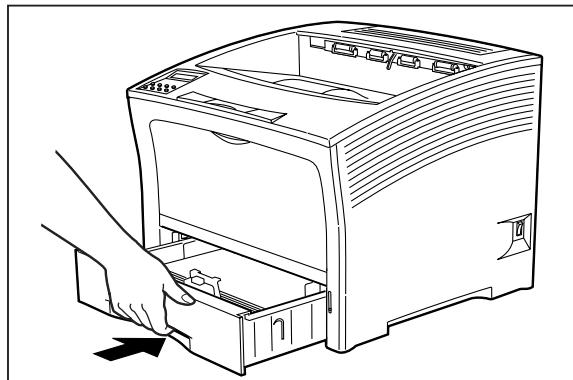
20. If you removed either Tray 2 or Tray 3, reinstall it.
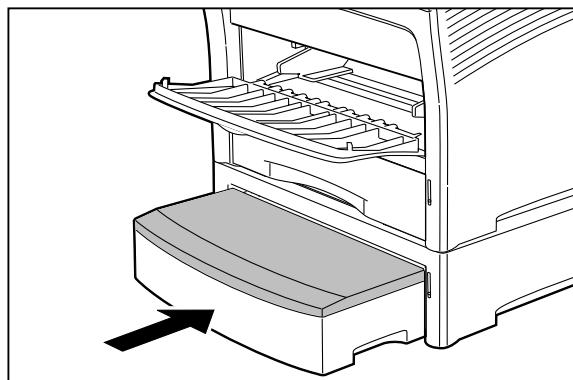
21. Close the top cover.
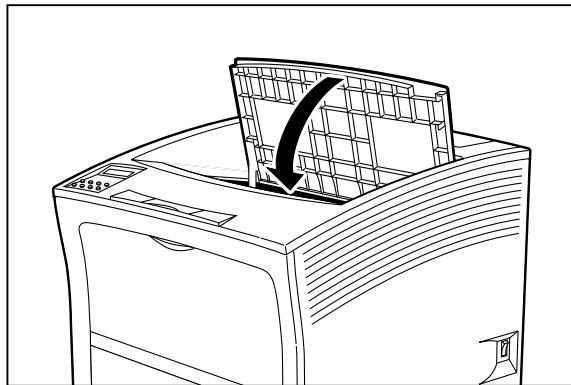
22. Reinstall any other trays that you removed.
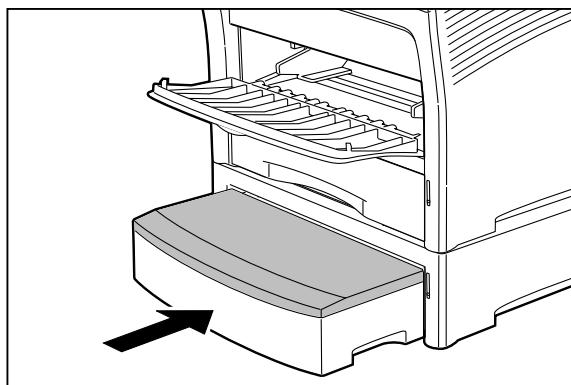
Clearing an E0 Jam

If an E0 error code precedes the error message on the first line of the control panel display, paper has jammed at the high capacity feeder. Use the following procedure to clear a paper jam in this location:

1. Pull the high capacity feeder paper drawer out.
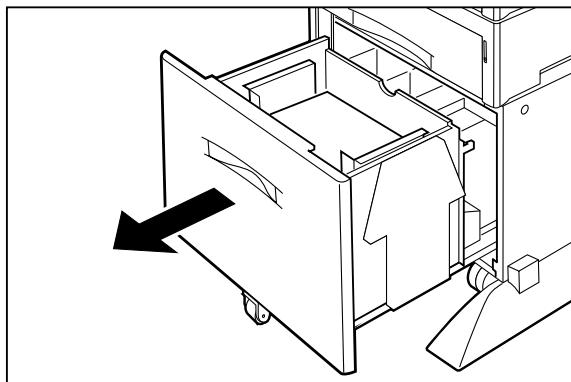
2. Remove any jammed paper from the paper drawer.
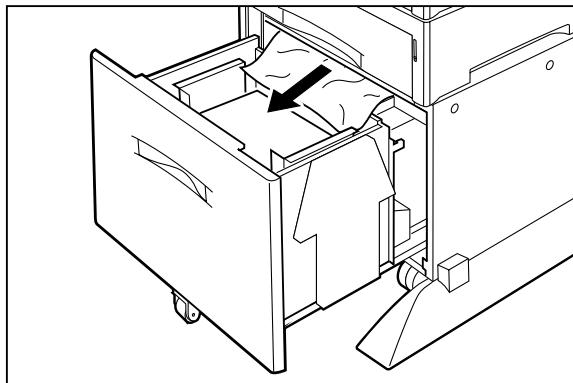
3. Push the paper drawer back into the high capacity feeder, making sure the drawer is properly closed.
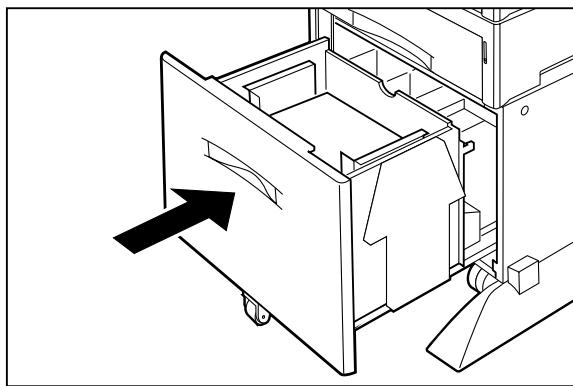
4. Check the display to make sure the printer is ready for printing.

Clearing an E7 Jam

If an E7 error code precedes the error message on the first line of the control panel display, paper has jammed at the duplexer. Use the following procedure to clear a paper jam in this location:

1. Locate the hand grip on the rear cover and pull the rear cover open.

Do not touch any parts inside the duplex printing unit.
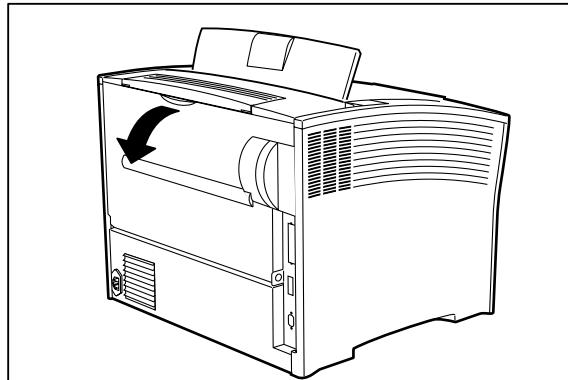
Grasp both sides of the duplex printing unit and pull it toward you to remove it. Carefully remove any jammed paper from the duplex unit or from within the printer.

NOTE: If you can not remove the jammed paper, refer to the procedure for removing jammed paper for an E2-1 error message.
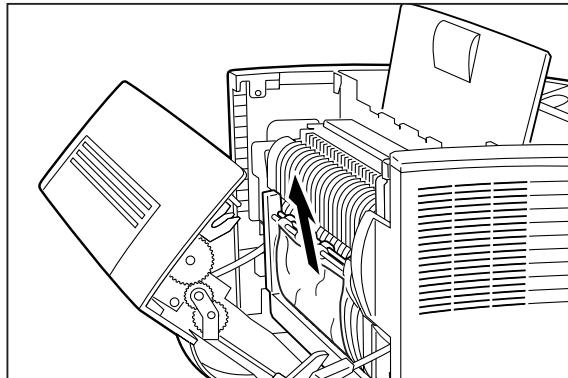
WARNING: The fuser unit becomes very hot right after the printer has been used. Be careful not to touch the fuser unit.

2. Reinsert the duplex printing unit into the printer, and close the rear cover.
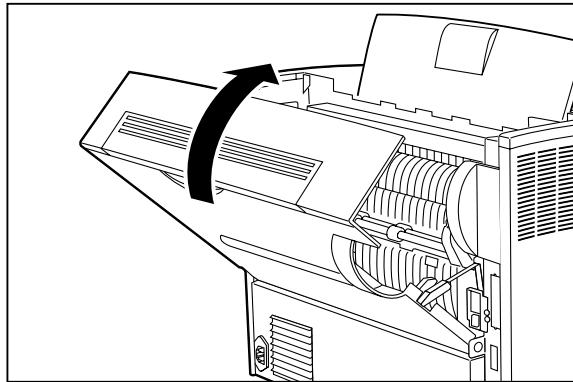
3. Check the display and make sure the printer is ready for printing.

Clearing an E8 Jam

If an E8 error code precedes the error message on the first line of the control panel display, paper has jammed at the offset output tray. Use the following procedure to clear a paper jam in this location:

1. Open the rear cover of the offset output tray by pulling on the recessed area on the rear cover.
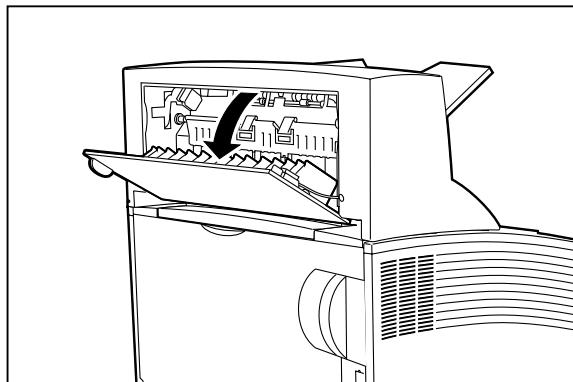
2. Remove any jammed paper.
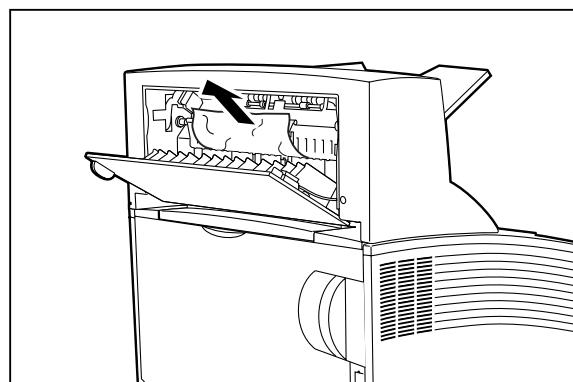
3. Close the rear cover.
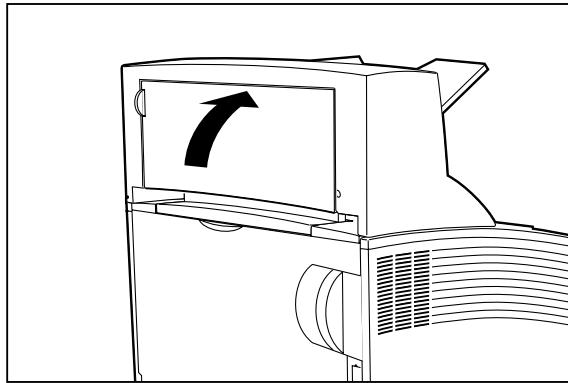
4. Check the display and make sure the printer is ready for printing.

Print Image Quality Problems

When functioning correctly, the printer should produce printed paper that is relatively flat and undamaged, containing a fused image of correct intensity—without streaks, smears, spots, or missing areas. If the printed sheets that your printer produces do not meet these qualifications, there is a print image quality problem.

- **Minor Print Image Quality Problems** can be caused by exhausted or damaged consumables, such as the toner cartridge. These problems area easily corrected by simply replacing the consumable.

- **Major Print Image Quality Problems** can be caused by a malfunctioning or broken component. These problems may require you to call a service technician to determine and correct the problem.

This section contains detailed procedures for correcting the following print image quality problems:

- Image is extremely faint and/or image contains blank areas
- Entire page is blank
- Image is extremely dark and/or white areas are not clean
- Entire page is black
- Black lines on page
- Ghost images on page
- Black spots on page
- Back of printed page is dirty
- Finished print is damaged
- Finished image rubs off of the paper
- Other print image quality problems

Image is extremely faint and/or image contains blank areas

The following characteristics define this print image problem:

- The print is very light.
- There are no dark black areas.
- Parts of images, letters, or words may be missing.
- The image may easily rub off.
- White areas on the page are generally clean, with no toner con-tamination.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this print image quality problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Attempt to increase toner in the printer developer system by running 20 copies of a page with only a few lines of text on it.

   If you have been printing pages that contain dense text or heavy graphics, you may have tem-porarily depleted the toner in the printer developer system. Running 20 copies of minimum text should increase image darkness.

2. Replace all of the paper in the paper trays with newly opened paper.

   The paper in the trays may be damp or damaged, resulting in poor image transfer. New paper may correct the problem.

3. Replace the toner cartridge with a new one.

   The cartridge may have reached end of life or may be damaged.

4. Call your service technician.

   This image quality problem may be caused by a malfunctioning or broken component that requires service.

Entire Page is Blank

The following characteristics define this print image problem:

- The entire page is blank—there is no image, neither a very faint image nor a partial image.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this print image quality problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Remove the toner cartridge from the printer, then reinstall it making sure it is securely seated inside the printer.

The toner cartridge may not be seated correctly. Through use and vibration the toner cartridge may have disconnected from the electrical contacts inside the printer. Reinstalling the toner cartridge should reestablish a good electrical connection.

2. Disconnect then reconnect the interface cable that runs between the printer and the host computer.

   There could be a bad connection between the printer and the computer. Reconnecting both ends should reestablish a good electrical connection. If you have another interface cable available, substitute that cable for the one currently connecting the printer and the computer.

3. Reinstall the appropriate print driver software located in the DRIVERS folder on the Electronic Library CD-ROM.

   The print driver software running on the host computer may be corrupted. Reinstalling the software is an easy and inexpensive way to isolate or eliminate the cause of the problem.

4. Replace all of the paper in the paper trays with newly opened paper.

   The paper in the trays may be damp or damaged, resulting in poor image transfer. New paper may correct the problem.

5. Replace the toner cartridge with a new one.

   The toner cartridge may be damaged.

6. Call your service technician.

   This image quality problem may be caused by a malfunctioning or broken component that requires service.

Image is extremely dark and/or white areas are not clean

The following characteristics define this print image problem:

- The print is very dark.
- Black image areas are too black, with little or no detail in them.
- There is little or no separation between individual letters and words.
- White areas on the page may have a light gray cast to them.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this print image quality problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. If your printer and software allows you to change the image density setting, adjust the setting to the midpoint and print 20 pages of dense text or graphics.

   If your system has an image density adjustment and it is set to maximum darkness, unused toner may build up in the printer developer system and cause dark and dirty prints.

2. If your printer and software does not have an image density adjustment, attempt to decrease the amount of toner in the printer developer system by running 20 pages of dense text or graphics. Do not run a solid black page.

If you have been running prints that contain sparse text and abundant white area, you may have temporarily over-toned the printer developer system. Running 20 pages of dense text or graphics should use up the extra toner in the developer system.

3. Replace the toner cartridge with a new one.

The toner cartridge imaging circuity or the cleaning system may be damaged.

4. Call your service technician.

This image quality problem may be caused by a malfunctioning or broken component that requires service.

Entire page is black

The following characteristics define this print image problem:

- The entire page is completely black. There is no image, only a sheet of paper covered, except perhaps for a narrow white border, in solid black toner.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this print image quality problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Remove the toner cartridge from the printer, then reinstall it making sure it is securely seated inside the printer.

The toner cartridge may be seated incorrectly. Through use and vibration, the toner cartridge may have disconnected from the electrical contacts inside the printer. Reinstalling the toner cartridge should reestablish a good electrical connection.

2. Disconnect then reconnect the interface cable that runs between the printer and the host computer.

There may be a bad connection between the printer and the computer. Reconnecting both ends should reestablish a good electrical connection. If you have another interface cable available, substitute that cable for the one currently connecting the printer and the computer.

3. Reinstall the print driver software located in the DRIVERS folder on the Electronic Library CD-ROM.

The print driver software running on the host computer may be corrupted. Reinstalling the software is an easy and inexpensive way to isolate or eliminate the source of the problem.

4. Replace the toner cartridge with a new one.

The toner cartridge may be damaged.

5. Call your service technician.

This image quality problem may be caused by a malfunctioning or broken component that requires service.

Black lines on the page

The following characteristics define this print image problem:

- There are black lines running either horizontally or vertically on the page. The lines may be isolated lines or they may be in groups or in tight patterns.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this print image quality problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Replace the toner cartridge with a new one.

   The toner cartridge may be scratched or damaged.

2. Call your service technician.

   This image quality problem may be caused by a malfunctioning or broken component that requires service.

Ghost images on the page

The following characteristics define this print image problem:

- Faint ghost images appear randomly on the page. The image is generally a shadowy version of the previously printed page. The quality of the main image is usually not affected.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this print image quality problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. If you were printing multiple copies of the same image, print 20 pages of varying images.

   Printing repeated impressions of the same image may leave a slight residual electrical image or faint toner image on the surface of the toner cartridge drum. This faint image is then transferred to the sheet of paper along with the main image.

2. Replace the toner cartridge with a new one.

   The toner cartridge cleaning system may be malfunctioning, failing to clean the previous image completely off of the toner cartridge drum.

3. Call your service technician.

   This image quality problem may be caused by a malfunctioning or broken component that requires service.

Black Spots on the Page

The following characteristics define this print image problem:

- There are spots of toner scattered randomly across the page. The spots may be few and isolated, or clustered into larger spots that have a rough texture. If the back of the page is also dirty, skip this procedure and go to the next image quality procedure—"Back of the page is dirty".
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this print image quality problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Open the paper trays and check to see if there is any toner inside the trays. If there is toner inside a tray, remove and clean the trays, then replace the paper with clean paper.

   A paper jam can cause a small amount of toner to contaminate a paper tray.

2. Print 10 blank pages.

   Printing blank pages can clean the printer system of small amounts of toner that may have contaminated the paper path as a result of a recent paper jam.

3. Remove the toner cartridge and inspect it for small pieces of paper that might be stuck between the drum and the toner cartridge frame. Carefully remove the pieces of paper. If you cannot remove the paper, replace the toner cartridge with a new one.

   When you clear a paper jam, a piece of paper may tear off and lodge between the drum and the toner cartridge frame. This paper scrap creates a channel that allows toner from the cleaning system to leak out onto paper as it passes through the printer.

4. Call your service technician.

   This image quality problem may be caused by a malfunctioning or broken component that requires service.

Back of the Printed Page is Dirty

The following characteristics define this print image problem:

- When a printed sheet exits the printer, there are marks on back of the page.
- The image side of the paper may or may not be clean.
- The control panel does not display an error code.
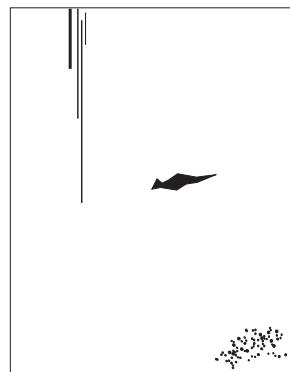
The following procedure guides you through multiple actions that may solve this print image quality problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Open the paper trays and check to see if there is any toner inside the trays. If there is toner inside a tray, remove and clean the trays, then replace the paper with clean paper.

   A paper jam can cause small amount of toner to contaminate a paper tray.

2. Print 10 blank pages.

   Printing blank pages can clean the printer system of small amounts of toner that may have contaminated the paper path as a result of a recent paper jam.

3. Turn the printer off, wait 10 minutes for the fuser to cool, then open all of the printer access covers and inspect the interior of the printer for toner contamination. Clean off any toner that you find.

   After any paper jam, toner from the jammed sheet of paper may contaminate the paper path. When a sheet of paper passes through the printer, toner contamination is inadvertently transferred to the back side of the paper. If the contamination proves difficult or impossible for you to remove, go to step 4.

4. Remove the toner cartridge and inspect it for small pieces of paper that might be stuck between the drum and the toner frame. Carefully remove the pieces of paper. If you cannot remove the paper, replace the toner cartridge with a new one.

   When you clear a paper jam, a piece of paper may tear off and lodge between the drum and the toner cartridge frame. This paper scrap creates a channel that allows toner from the cleaning system to leak out onto paper as it passes through the printer.

5. Call your service technician.

   This image quality problem may be caused by a malfunctioning or broken component that requires service.

Finished Print is Damaged

The following characteristics define this print image problem:

- The printed sheet is either wrinkled, torn, or creased.
- There is no paper jam.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this print image quality problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Replace all of the paper in the paper trays with newly opened paper.

   The paper in the trays may be damp, warped, or damaged. As the paper travels through the printer, it may catch or tear on printer components. New paper may correct the problem.

2. Print a few sheets out of the main paper tray and a few prints out of the front tray. If the damage appears to be isolated to paper that is fed from one source, carefully inspect the source feeder for scraps of paper or obviously broken components. Remove any scraps of paper that you find. If you discover a broken component, call for service.

Broken and dangling components or scraps of paper lodged in a paper feeder can damage a sheet of paper as it moves out of the feeder.

3. Turn the printer off and open all of the printer access covers. Inspect the interior of the printer for scraps of paper or obviously broken components that could be obstructing the paper path. Remove any scraps of paper that you find. If you see a broken component, call for service.

Broken and dangling components or scraps of paper lodged inside the printer can damage a sheet of paper as it moves along the paper path.

4. Call your service technician.

This problem may be caused by a malfunctioning or broken component that requires service.

Finished Image Rubs Off of the Page

The following characteristics define this print image problem:

- The toner image is not completely affixed to the finished print; the image easily rubs off of the page.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this print image quality problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Inspect the finished print. If the image is extremely light, go to the first image quality problem procedure in this section, "Image is extremely faint and/or image contains blank areas."

The ability of the printer to melt and permanently bond the toner image to the page depends a great deal on the darkness of the image. A light image causes less heat to build up during the fusing process, which in turn makes the image on the page less permanent.

2. If the image density is normal but the image still easily rubs off, call your service technician.

This problem may be caused by a malfunctioning or broken component that requires service.

Other Print Image Quality Problems

The following characteristics define this print image problem:

- The finished print has a problem that is not identified by any of the other procedures in this manual.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this print image quality problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Replace all of the paper in the paper trays with newly opened paper.

The paper in the trays may be damp or damaged, resulting in poor image quality. New paper may correct the problem.

2. Replace the toner cartridge with a new one.

   The toner cartridge may have reached end of life or is damaged.

3. Disconnect then reconnect the interface cable that runs between the printer and the host computer.

   There may be a bad connection between the printer and the computer. Reconnecting both ends should reestablish a good electrical connection. If you have another interface cable available, substitute that cable for the one currently connecting the printer and the computer.

4. Reinstall the print driver software.

   The print driver software that is running on the host computer may be damaged. Reinstalling the software is an easy and inexpensive way to isolate or eliminate the source of the problem. Refer to the DRIVERS folder on the electronic library CD-ROM for detailed instructions on installing the driver.

5. Call your service technician.

   This image quality problem may be caused by a malfunctioning or broken component that requires service.

Miscellaneous Problems

Some printer problems may not generate error codes or produce observable print image defects. These miscellaneous problems may effect only the printer or they may effect things outside of the printer, such as the room lights or a nearby radio receiver.

This section contains detailed procedures for correcting the following problems:

- **Printer is Inoperative**
- **Printer Operates Erratically**
- **Printer Makes Unusual Noises**
- **Room Lights Dim or Flicker When Printer Starts**
- **Printer Interferes with Nearby Radio or Television Reception**

Printer is Inoperative

The following characteristics define this type of problem:

- The printer appears to have no power.
- The control panel does not light up or display characters.
- The printer motors do not run and the printer does not warm up.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this print image quality problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Make sure that you push the [I] on the main power switch to turn on the printer.

2. Check to make sure the AC power cord is firmly plugged into the AC wall outlet and that the other end of the AC power cord is firmly plugged into the printer.

   Sometimes the AC power cord is only partially plugged in and is not making good electrical contact. If the AC power cord keeps working loose you might consider moving the printer to a safer location. If the AC wall outlet is broken, allowing the power cord to easily fall out, replace the outlet.

3. Test for voltage present by plugging an AC electrical device, such as a lamp, into the AC wall outlet. If the lamp does not light, inspect the building circuit breakers or check for a broken AC wall outlet.

   A circuit breaker trips because there was an overload on the line. A tripped breaker may indicate that you have too many AC devices working off the same line or that you have faulty building wiring. If the breaker is not tripped, but the lamp doesn't light when plugged into the outlet, replace the outlet or have an electrician check the line.

4. Turn the printer off and wait 20 minutes, then turn the printer on.

   Thermal sensors may have shut down the printer. Waiting 20 minutes for the printer to reset may return the printer to normal operation. A thermal shutdown may indicate there is a more serious problem with the printer. If the problem reoccurs, call for service.

5. Call your service technician.

   This problem may be caused by a malfunctioning or broken component that requires service.

Printer Operates Erratically

The following characteristics define this type of problem:

- The printer does not function correctly.
- The printer may go into frequent warm-up.
- The control panel may display garbled characters.
- The printer may lose power or stop printing for no apparent reason.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this print image quality problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Check to make sure the AC power cord is firmly connected to the AC wall outlet and that the other end of the AC power cord is firmly connected to the printer.

   A loose or partially connected AC power cord may cause erratic operation. If the AC power cord is repeatedly loose or disconnected, you may consider moving the printer to a safer location. If the AC wall outlet is broken, allowing the power cord to easily fall out, replace the outlet.

2. Check to make sure the computer interface cable is firmly connected to the printer and that the other end of the cable is firmly connected to the computer.

There may be a bad connection between the printer and the computer. Reconnecting both ends should reestablish a more reliable electrical connection. If you have another interface cable available, substitute the new cable for the one currently connecting the printer and computer.

3. Open and then firmly close all printer doors and covers.

Interlock switches monitor the position of printer doors and covers for safety reasons. When a door is closed, the interlock switch is activated and the printer can operate. When a door is open, the interlock switch is not activated and the printer cannot operate. If a door is not firmly closed, the interlock switch can bounce between being activated and being not activated—confusing the system and causing erratic printer operation.

4. Reinstall the print driver software.

The print driver software that is running on the host computer may be damaged. Reinstalling the software is an easy and inexpensive way to isolate or eliminate the problem. Refer to the DRIVERS folder on the Electronic Library CD-ROM for detailed instructions on installing the driver.

5. Unplug the AC power cord from the AC wall outlet. Plug a 100 watt lamp into the AC wall outlet and watch the lamp for 30 minutes. If the lamp flickers noticeably or dims then brightens, you should replace the outlet or have an electrician check the line.

Voltage surges or drops at the AC wall outlet can cause sensitive printer components to function erratically. In some instances wide voltage swings can seriously damage the printer.

6. Call your service technician.

This problem may be caused by a malfunctioning or broken component that requires service.

Printer Makes Unusual Noises

The following characteristics define this type of problem:

- The printer makes unusual noises or makes more noises than usual either while idle or while printing.
- The printer generates printed sheets without a problem.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this print image quality problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Turn the printer off and open all of the printer access covers. Inspect the interior of the printer for pieces of paper or obviously broken components that could be causing the noise. Remove any paper that you find. If you see a broken component, call for service.

Broken and dangling components or scraps of paper lodged inside the printer may be brushing against moving parts and causing the noise.

2. Inspect the fan outlets for broken grills or objects stuck in the fans. Remove any objects from the fan grill. If you see a broken grill or cover, call for service.

An object or part of a broken fan grill may be bushing against the fan and causing the noise. A broken fan grill is a potential safety hazard and should be replaced.

3. Call your service technician.

   This problem may be caused by a malfunctioning or broken component that requires service.

Room Lights Dim or Flicker When Printer Starts

The following characteristics define this type of problem:

- Nearby lights dim slightly or flicker when you first turn on the printer or when the printer begins printing.
- The lights remain normal when the printer is not on.
- The printer generates printed sheets without a problem.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this print image quality problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Unplug all devices that are plugged into the same AC wall outlet as the printer.

   During warm-up and at the start of each print run, the printer normally draws a large amount of current. If other devices are running off of the same AC circuit, the accumulative current draw may result in nearby lights momentarily dimming.

2. Have an electrician check your building wiring.

   There may be a problem with the AC outlet or the AC wiring in the building that needs the attention of a licensed electrician.

3. Call your service technician.

   This problem may be caused by a malfunctioning or broken component that requires service.

Printer Interferes with Nearby Radio or Television Reception

The following characteristics define this type of problem:

- When the printer begins printing, it causes audio noise in nearby radios or interferes with the picture in nearby televisions.
- The printer generates printed sheets without a problem.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this print image quality problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. If the radio/television is plugged into the same AC wall outlet as the printer, plug either the printer or the radio/television into another AC outlet.

   Electrical noise may be transmitted through the AC line. You can reduce the noise to the radio/television by using a dedicated AC wall outlet for the printer.

2. Move the radio/television away from the printer.

Your printer complies with the FCC rules regarding radio/television interference caused by digital devices. This printer generates, uses, and may radiate low levels of radio frequency energy that could interfere with radio and television reception in some installations. Increasing the distance between the printer and the radio/television is a very effective method for reducing minor interference.

3. Identify the building circuit breaker that controls the AC outlet to your printer. Identify all of the AC outlets that are controlled by that circuit breaker. Unplug all devices from the AC outlets that are controlled by that circuit breaker, except for the printer.

Electrical noise may be transmitted through the AC line. In difficult interference cases you may have to dedicate an entire AC line to the printer.

4. Call your service technician.

This problem may be caused by a malfunctioning or broken component that requires service.

Warning Messages and Error Messages

The control panel display shows a warning message or error message when there is a problem with the printer. Some messages indicate routine status conditions such as an empty paper tray, while others indicate that a sheet of paper has jammed in a specific area of the printer. Some messages indicate more serious printer problems that may require the help of a service technician.

Warning messages use only the second line of the display and indicate conditions that do not prevent the printer from operating. For example, if Tray 1 is out of paper but the printer is currently drawing paper from Tray 2, a warning message will appear on the second line of the display indicating that Tray 1 is out of paper—but the printer will continue to operate, drawing paper from Tray 2.

Error messages use both lines of the display and indicate conditions that prevent the printer from operating. The first line of an error message contains the error code and type of error, while the second line of the display contains information about the action required to recover from the error.

When the control panel displays a warning or error message, refer to the following tables and complete the actions recommended for the specific message that is shown.

Warning Messages

The following table lists warning messages, possible causes, and the actions required to correct each cause.

Warning Message Line 2 of display	Possible Cause	Action
Tray 1 Missing	Tray 1 is not installed.	Install the tray.
Tray 2 Missing	Tray 2 is not installed.	Install the tray.
Tray 3 Missing	Tray 3 is not installed.	Install the tray.
Paper Low Tray 1	The paper supply in tray 1 is low.	Add paper to the tray. See "Loading the Main Tray" on page 2-11.
Paper Low Tray 2	The paper supply in Tray 2 is low.	Add paper to the tray.
Paper Low Tray 3	The paper supply in Tray 3 is low.	Add paper to the tray.
Paper Out Tray 1	There is no paper in Tray 1.	Add paper to the tray.
Paper Out Tray 2	There is no paper in Tray 2.	Add paper to the tray.
Paper Out Tray 3	There is no paper in tray 3.	Add paper to the tray.
Output Tray Full	The output tray is full.	Remove paper from the tray.
Offset Tray Full	The offset output tray is full.	Remove paper from the tray.
HCF Lifting	The HCF is lifting.	Wait until the HCF has finished lifting completely.
Maintenance Req	Maintenance is required.	Call service.

Error Messages

The table below lists error messages, the possible causes of each error, and the actions required to recover from each error.

Error Message Line 1	Error Message Line 2	Possible Cause	Action
E0 JAM HCF **E1 JAM TRAY/REGI** **E2-1 JAM MISFEED** **E2-2 MISFEED DUP** **E3 JAM REGI/FUSR** **E4 EXIT JAM** **E7 JAM DUPLEX** **E8 JAM OFF. TRAY**	Remove Paper	There is a paper jam inside the printer.	Remove the jammed paper from the indicated location. See the "Paper Jams" on page 5-4 for information about removing paper jams.
E5 TRAY OUT	Reposition Front	The front tray is out.	Reposition or close the front tray.
E5 COVER OPEN	Top/Rear	The top cover or rear cover is open.	Close the top or rear cover.
E5 COVER OPEN	Offset Tray	The offset tray cover is open.	Close the offset tray cover.
E5 COVER OPEN	Close HCF Cover	The HCF cover is open.	Close the HCF cover.
J3 TONER CART.	Install/Reset	The toner cartridge is not installed, or an incorrect cartridge is installed.	Install the correct toner cartridge according to the specifications. See "Replacing the Toner Cartridge" on page 4-3.
LOAD PAPER TRAY1	Paper Size/ Paper Type	Tray 1 is empty.	Load paper into the tray.
LOAD PAPER TRAY2	Paper Size/ Paper Type	Tray 2 is empty.	Load paper into the tray.
LOAD PAPER TRAY3	Paper Size/ Paper Type	Tray 3 is empty.	Load paper into the tray.
LOAD PAPER FRONT	Paper Size/ Paper Type	The front tray is empty.	Load paper into the tray.
OUTPUT TRAY FULL	Remove Paper	The output tray is full.	Remove paper from the tray.
OFFSET TRAY FULL	Remove Paper	The offset output tray is full.	Remove paper from the tray.

Error Message Line 1	Error Message Line 2	Possible Cause	Action
U2 ROS FAILURE	Call Service	The ROS has failed.	Turn the printer off, then turn it on. If the problem reoccurs, contact an authorized service provider.
U4 FUSER FAILURE	Call Service	The fuser has failed.	
HCF UNIT FAILURE	Call Service	The HCF has failed.	
OFFSET TRAY FAIL	Call Service	The offset tray has failed.	
DUPLEX FAILURE	Call Service	The duplexer has failed.	
MAIN MOTOR FAIL	Call Service	The main motor has failed.	
ENGINE NV FAIL	Call Service	The engine has failed.	
FAN FAILURE	Call Service	The fan has failed.	
MAINTENANCE REQ	Press Start	The printer needs maintenance.	Press the START button.

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Chapter 6

Using the Duplexer

In this Chapter . . .

Chapter 6

Using the Duplexer

In this Chapter . . .

About this Chapter

This chapter provides all of the information necessary to install, use, and maintain the duplexer.

About the Duplexer

The duplexer is a customer-installed optional device that enables automatic printing on both sides of a sheet of paper. The duplexer is designed to be mounted inside the printer, just below the exit transport in the paper path. The duplexer drives a single-sided print partially out of the exit transport, then reverses the direction and pulls the printed page back into the printer to print the second side. The printer can image two pages at a time, therefore the duplex unit will process two pages (sides 1 and 3) then refeed these pages for sides 2 and 4.

Major Components of the Duplexer

The following figure shows the major components of the duplexer.
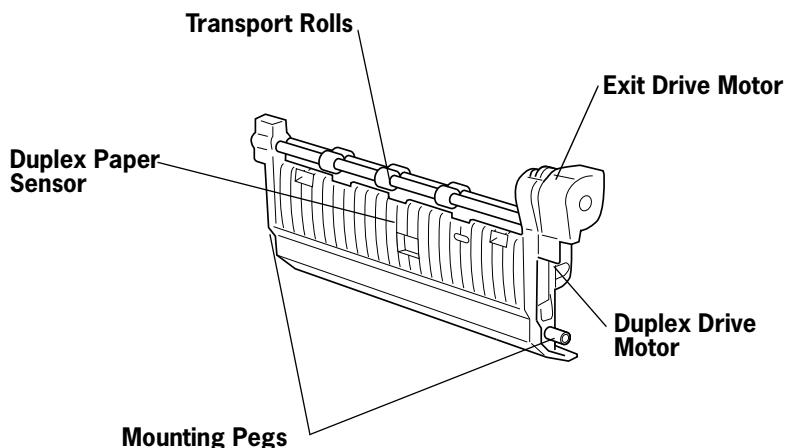
Installing the Duplexer

Before you begin the installation procedure, remove the duplexer from its packaging and remove any shipping tape or cardboard inserts. Verify that you have received the following items:.

Duplexer Installation Sheet
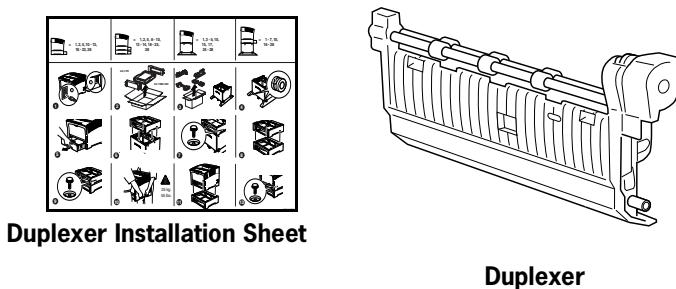
Duplexer

Figure 6-1: Contents of Duplexer Shipping Box.

Use the following procedure to install the duplexer:
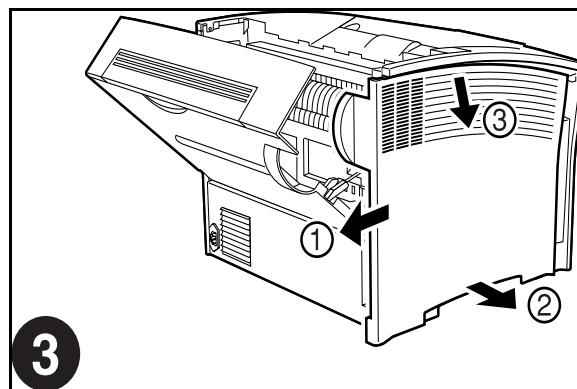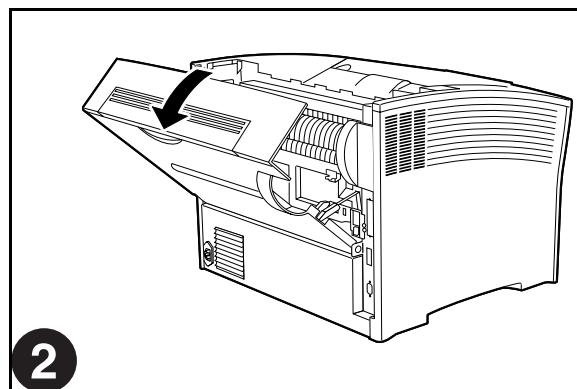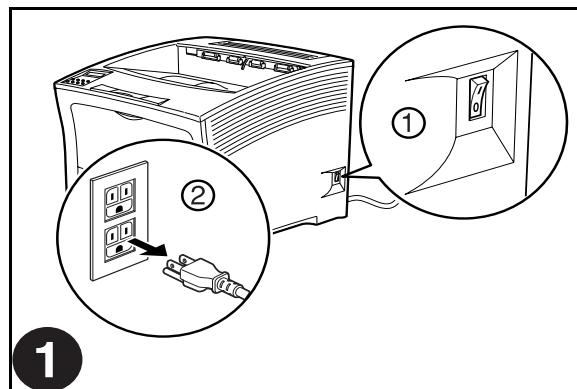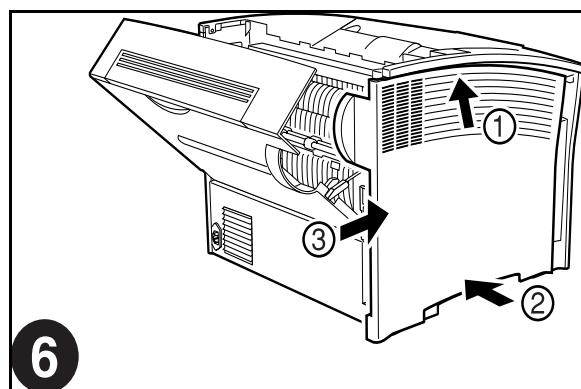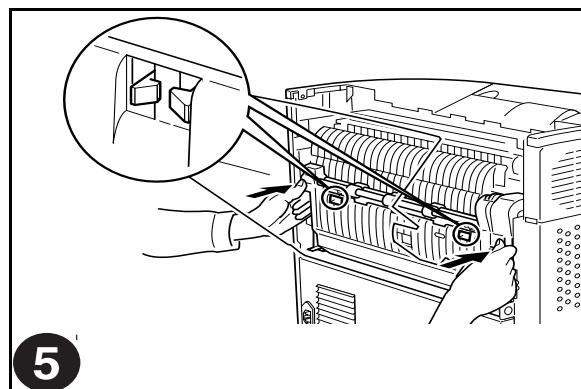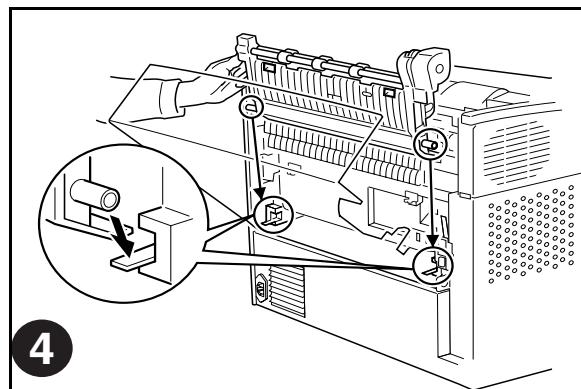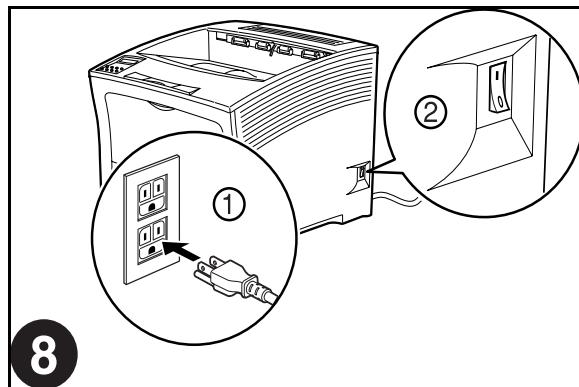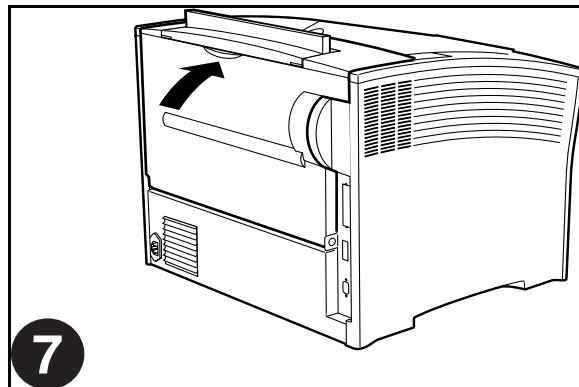
Testing the Duplexer

After installing the duplexer, use the following procedure to make sure it transports paper correctly:

1. Turn the printer on by pressing the [I] on the power switch on the right side of the printer.

2. Once the printer has warmed up and displays the "**Ready**" message on the control panel display, use any software application to print a few duplexed sheets.

3. If the duplexer does not transport paper or if the control panel shows an error message, refer to "Solving Duplexer Problems" on page 6-6.

Solving Duplexer Problems

When there is a problem with the duplexer, the printer control panel displays an error code and error message. Most duplexer error codes indicate routine status conditions such as a paper tray running out of paper or a paper jam in a specific area of the duplexer. Some error codes indicate much more serious problems that may require the help of a service technician.

- If the duplexer is inoperative after installation, refer to **"Installation Problems" on page 6-6** and complete the recommended procedure.
- If the printer control panel displays an error message or an error code, refer to **"Interpreting Duplexer Error Codes" below**.
- If you have a duplexer problem but the printer control panel does not display an error message or error code, refer to **"Correcting Miscellaneous Duplexer Problems" on page 6-8** and follow the directions for correcting that problem.

Interpreting Duplexer Error Codes

The printer control panel displays error messages when there is a problem with the printer or any of the optional paper-handling components. The following table lists all of the error messages associated with the duplexer, the possible cause of the error, and the action to take to correct the problem. If the control panel shows an error message that concerns another part of the printer, refer to **Chapter 5: Troubleshooting** for a complete list of all warning and error messages.

Error Message Line 1	Error Message Line 2	Possible Cause	Action
E2-2 MISFEED DUP	Remove Paper	There is a misfeed jam near the duplexer.	Remove the jammed paper. **See "Clearing Duplex Paper Jams" on page 6-7.**
E7 JAM DUPLEX	Remove paper	There is a paper jam in the duplexer.	Remove the jammed paper from the duplexer. **See "Clearing Duplex Paper Jams" on page 6-7.**
DUPLEX FAILURE	Call Service	The duplexer has failed.	Turn the printer off, then turn it on. If the problem reoccurs, contact an authorized service provider.

Installation Problems

Simple oversights during installation may cause problems when you first use the duplexer. If the duplexer is inoperative after you have installed it, use the following procedure to check several possible causes.

1. Turn the printer off by pressing the [**O**] on the power switch on the right side of the printer.
2. Make sure that the duplexer connector is firmly connected to the printer jack.
3. If the connector is firmly plugged into the printer, but the duplexer is still inoperative, return to **"Installing the Duplexer" on page 6-2** and carefully repeat all of the installation steps.
4. If the duplexer is still inoperative after reinstallation, remove it from the printer so you can run tests on the printer without the duplexer affecting the tests.

5. Print a few sheets of text or images to make sure the printer is still operational.

If the printer is operational when the duplexer is removed, contact either your sales representative or a service provider and report your problem.

If the printer is not operational after you have removed the duplexer, refer to **Chapter 5: Troubleshooting**. After correcting the printer problem, return to "**Installing the Duplexer**" **on page 6-2** and reinstall the duplexer.

Clearing Duplex Paper Jams

Use the following procedure to clear a duplex paper jam:

1. Open the rear cover of the printer.
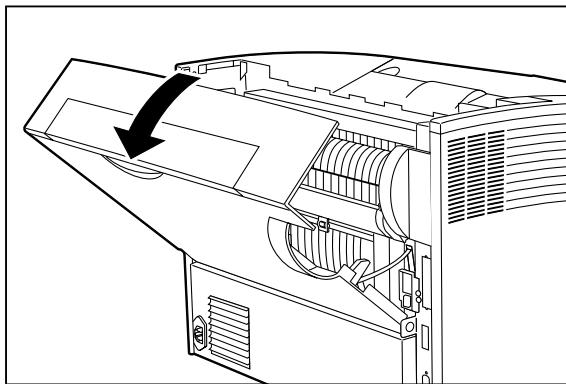
2. Remove any jammed paper from the duplex area.
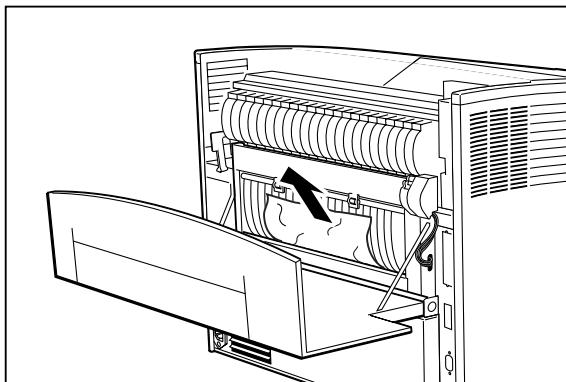
3. Close the rear cover of the printer.
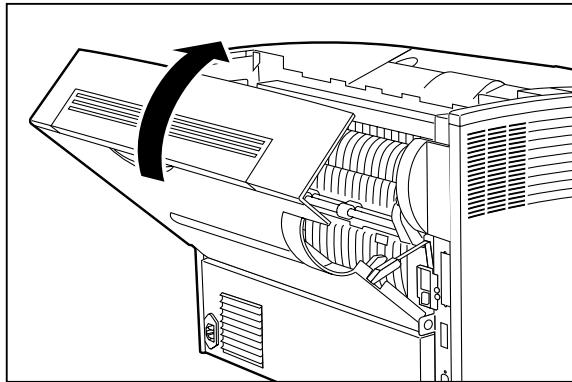
Correcting Miscellaneous Duplexer Problems

Some duplexer problems may not cause an error message and may not interfere with the operation of the printer. If you are experiencing one of the problems listed below and there is no error message shown on the control panel display, refer to the procedures in the following sections to check the possible causes of the specific problem.

- Inoperative duplexer
- Erratic operation
- Unusual noise

Inoperative Duplexer

The following characteristics define this duplexer problem:

- The duplexer appears to be inoperative.
- When attempting to print duplexed sheets, the duplexer does not respond and does not feed paper.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this duplexer problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Open and then firmly close all of the printer doors and covers.

   Interlock switches monitor the position of printer doors and covers. When a door is closed, the interlock switch is activated and the duplexer can operate. When a door is open, the interlock switch is not activated and the duplexer cannot operate. If a door is not firmly closed, the interlock switch may not be fully activated—resulting in an inoperative duplexer.

2. Test the printer by printing single-sided sheets from the main tray.

   If you cannot print a sheet of paper from the main tray and the printer does not display an error code, go to "Inoperative Printer" on page 5-3. If you can print a sheet of paper from the main tray, proceed to the next step.

3. Open the rear cover of the printer. Disconnect and reconnect the duplexer.

If the connection between the duplexer and the printer is not intact, the duplexer will not receive power or logic commands, resulting in an inoperative duplexer.
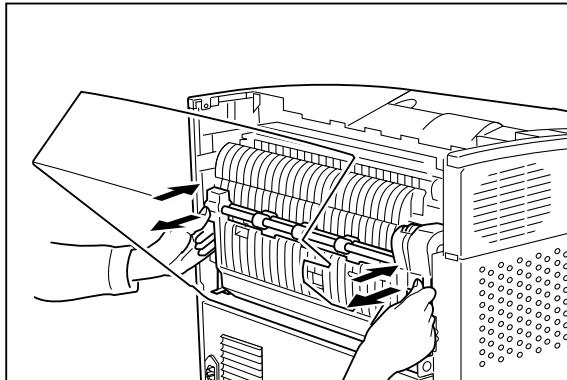
4. Examine the printer driver settings to make sure the duplexer is available as an installed option.

5. If the duplexer is correctly set as an installed option, reload the printer driver software.

   The printer driver software running on the host computer may be damaged. Reinstalling the software is an easy and inexpensive way to isolate or eliminate the problem. Refer to *t*he **DRIVERS** folder on the Electronic Library CD-ROM for detailed instructions on installing the driver.

6. Call your service technician.

   This problem may be caused by a malfunctioning or broken component that requires service.

Duplexer Operates Erratically

The following characteristics define this duplexer problem:

- The duplexer does not function correctly.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this duplexer problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Open the rear cover of the printer. Disconnect and reconnect the duplexer.

   If the connection between the duplexer and the printer is not intact, the duplexer will not receive power or logic commands, resulting in an inoperative duplexer.

.
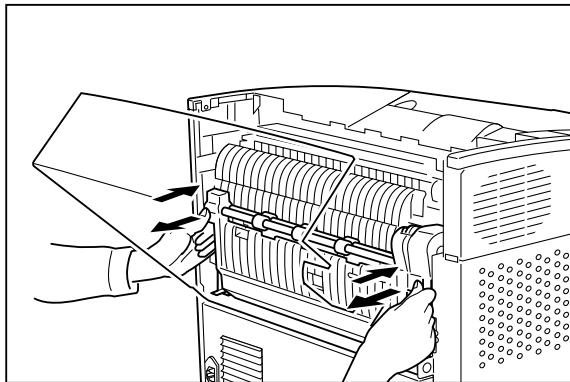
2. Test the printer by allowing it to run for a few days without the duplexer installed.

   If the printer operates erratically when the duplexer is not installed, refer to "Printer Operates Erratically" on page 5-36.

   If the printer does not operate erratically when the duplexer is not installed, reinstall the duplexer and proceed to the next step.

3. Open and then firmly close all of the doors and covers.

   Interlock switches monitor the position of printer doors and covers. When a door is closed, the interlock switch is activated and the duplexer can operate. When a door is open, the interlock switch is not activated and the duplexer cannot operate. If a door is not firmly closed, the interlock switch can bounce between being activated and being not activated - confusing the system and causing erratic operation.

4. Reinstall the printer driver software.

   The printer driver software running on the host computer may be damaged. Reinstalling the software is an easy and inexpensive way to isolate or eliminate the problem. Refer to the **DRIVERS** folder on the Electronic Library CD-ROM for detailed instructions on installing the drivers.

5. Call your service technician.

   This problem may be caused by a malfunctioning or broken component that requires service.

Duplex Makes Unusual Noises
The following characteristics define this duplexer problem:

- The duplexer makes unusual noises or makes more noise than usual either while idle or while printing.
- The duplexer feeds paper without a problem.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this duplexer problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Open the rear cover of the printer and inspect the inside of the duplexer for jammed paper or obviously broken components.

   Broken components or scraps of paper lodged inside the duplexer may be brushing against moving parts and causing the noise.

2. Call your service technician.

   This problem may be caused by a malfunctioning or broken component that requires service.

Removing the Duplexer

Use the following procedure to remove the duplexer:

1. Turn off the printer and disconnect the AC power cord from the AC wall outlet..
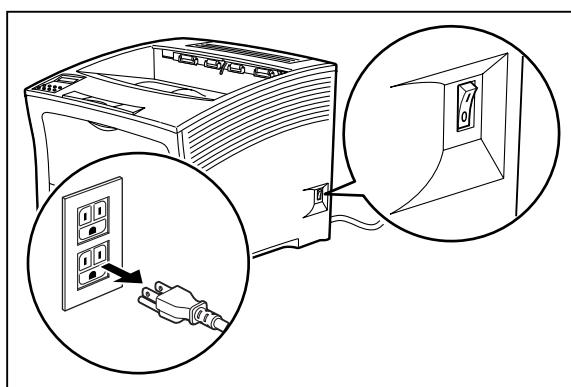
2. Locate the hand grip on the back of the printer and pull to open the rear cover..
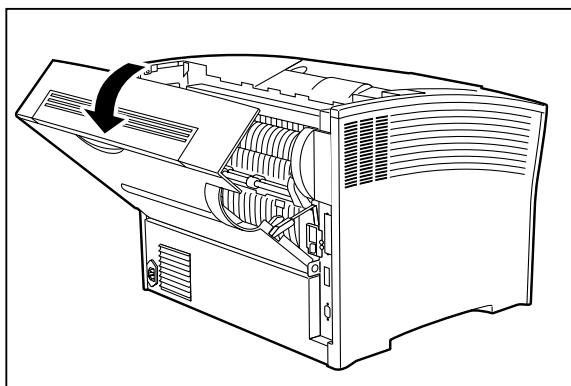
3. Carefully pull the top of the duplexer out toward you to disengage the upper mounting clips.
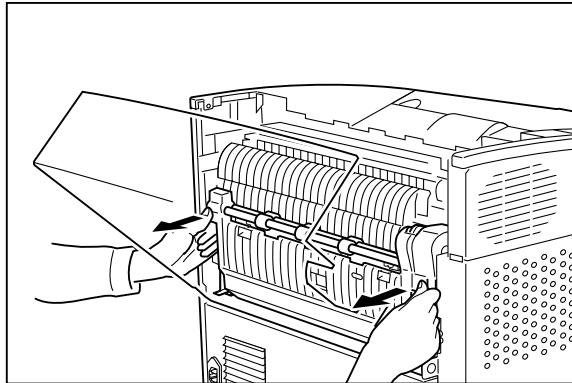
4. Slip the lower mounting pins out of the brackets inside the rear of the printer and lift the duplex unit out of the printer.
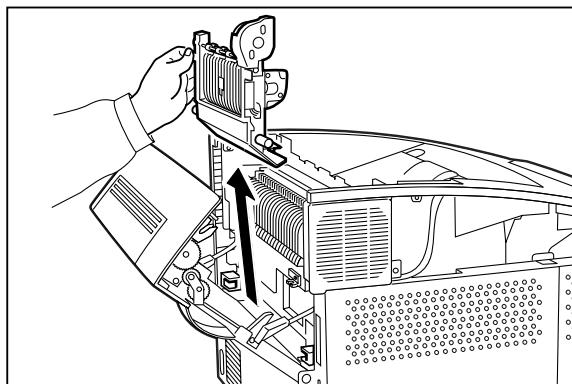
5. Close the rear cover.
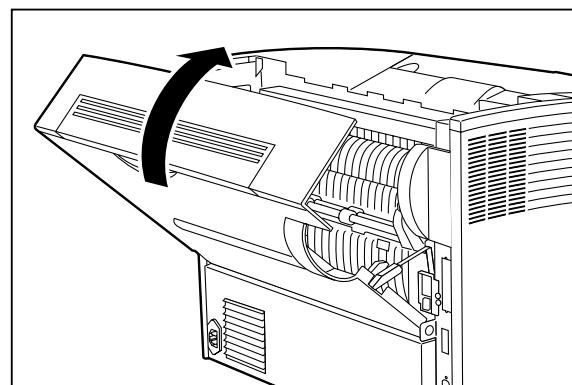
6. Insert the plug of the AC power cord into the AC wall outlet, and turn the printer on by pressing [I] on the power switch on the right side of the printer.

◆   ◆   ◆
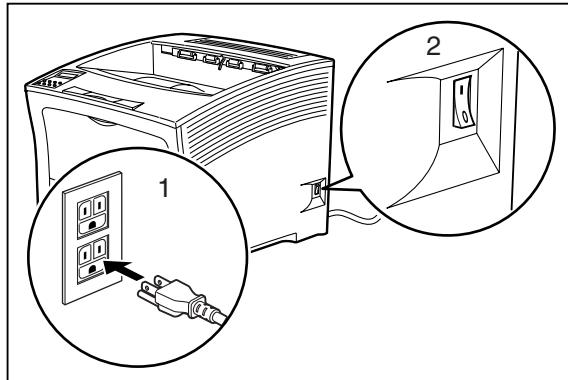
Chapter 7

Using the 500 Sheet Feeder

In this Chapter . . .

About this Chapter

This chapter provides all of the information necessary to install, use, and maintain the 500 sheet paper feeder option, including procedures for cleaning the feeder and removing paper jams.

About the 500 Sheet Feeder

The 500 sheet feeder is an optional single tray paper feeder that attaches under the printer, which accommodates either an A4/letter paper tray for standard formats or an A3/ledger paper tray for oversize formats. The tray holds a maximum of 500 sheets of standard weight paper. The printer supplies all of the operating power that is needed by the feeder, and motors and circuit boards internal to the feeder provide the feeder with drive and operational logic.

At the start of a print run the feeder motor switches on and begins to feed a sheet of paper out of a selected tray. Rubber rollers drive the sheet out of the tray, through the feeder, and into the printer. Sensors monitor the progress of the paper as it travels through the feeder.

The 500 sheet feeder can be installed in the following configurations:

- Printer and one 500 sheet feeder
- Printer and two 500 sheet feeders
- Printer and one 500 sheet feeder and high capacity feeder

Major Components of the 500 Sheet Feeder

The following illustration shows the major components of the 500 sheet feeder:
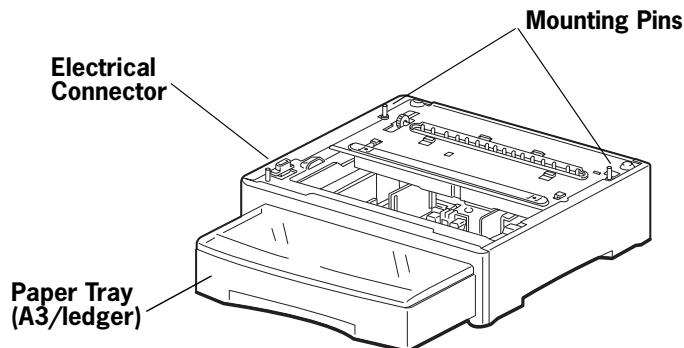
Installing the 500 Sheet Paper Feeders

Before installing the paper feeder(s), verify that you have received the following items in the paper feeder shipping box:

500 Sheet Paper Feeder

A4/letter paper tray OR A3/Ledger paper tray

2 Thumbscrews

Installation Sheet
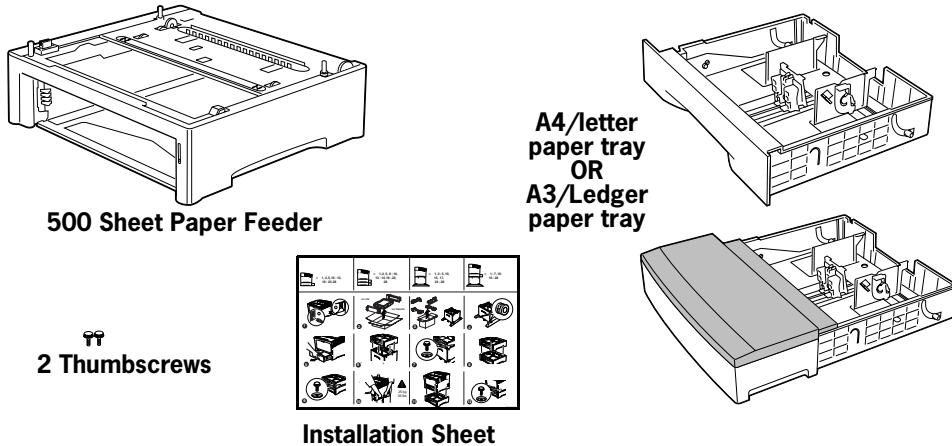
Installing One Paper Feeder

Use the following procedure to install one paper feeder:

WARNING: Before installing any options, turn the printer off by pressing [O] on the power switch on the right side of the unit and disconnect the power cord from the AC outlet. These precautions are necessary to avoid the risk of electric shock.

1. Remove the 500 sheet paper feeder from its packaging and remove any cardboard inserts and packing tape. Locate and set aside the small plastic bag containing two thumbscrews.

2. Place the paper feeder on a sturdy, level surface.

NOTE: Do not move the printer once the paper feeder is installed.

3. Remove the paper tray from the paper feeder.
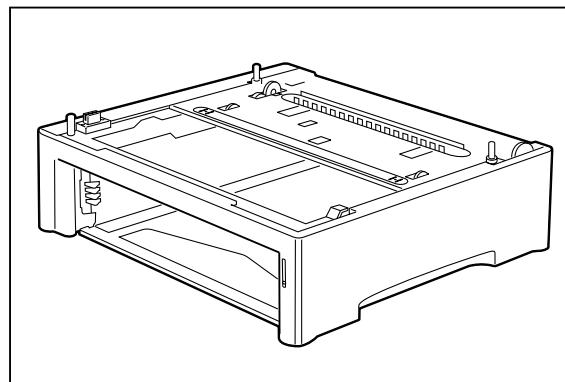
4. Turn the printer off by pressing [O] on the power switch on the right side of the unit, and disconnect the power cord from the AC outlet.

NOTE: Installing the paper feeder while the printer is on may damage the printer or paper feeder.

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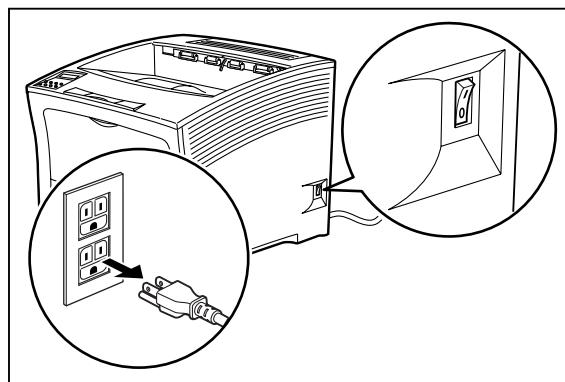
5. Close the front paper tray, remove any printed sheets from the paper output tray, and close the top cover.
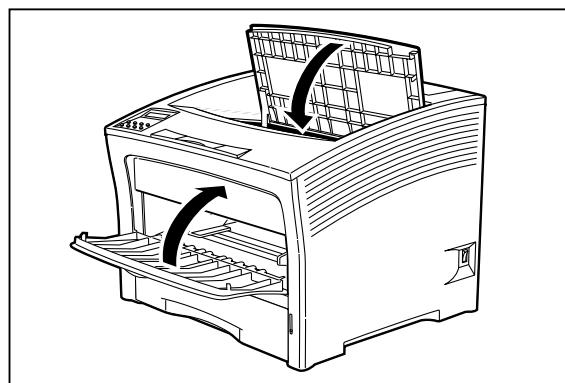
6. Remove the main paper tray from the printer.
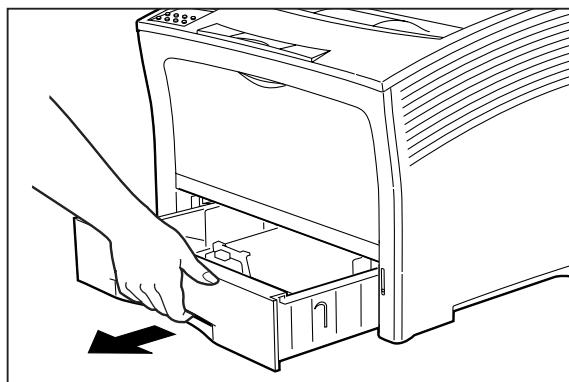
7. Align the three holes on the bottom of the printer with the three pegs on the paper feeder, and lower the printer onto the paper feeder.
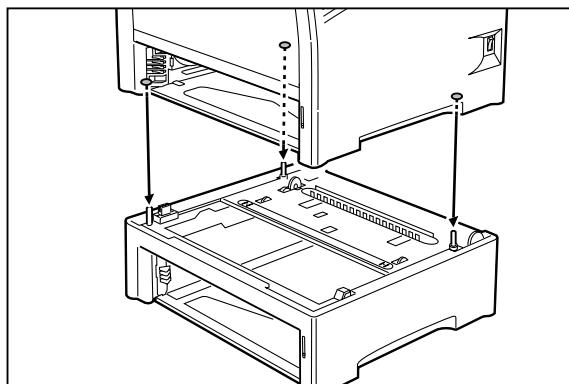
NOTE: Be sure to lower the printer gently. Components inside the printer may be damaged by lowering the printer quickly.

8. Insert the two thumbscrews supplied with the paper feeder into the holes on the base of the printer, and turn them until tight.
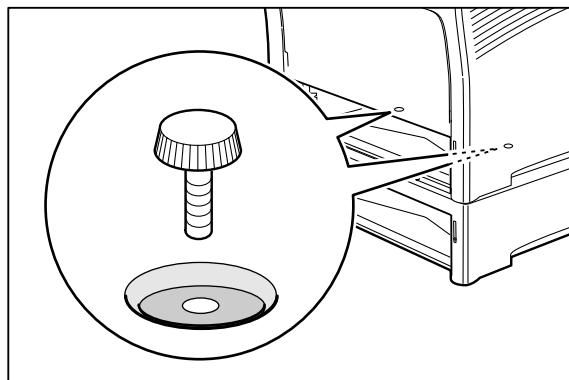
9. Load paper into the paper tray.
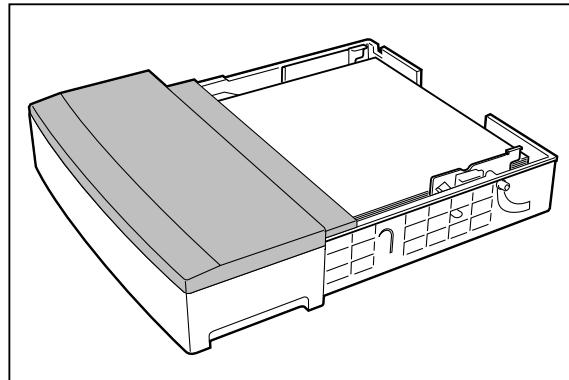
10. Insert the paper tray all the way into the paper feeder, making sure the tray is properly seated.
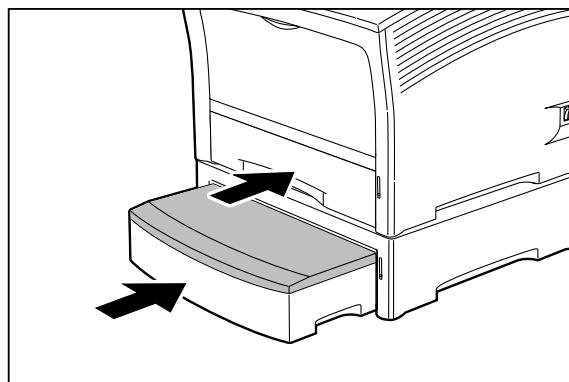
11. Insert the plug of the power cord into the AC outlet, and turn the printer on by pressing [I] on the power switch on the right side of the printer.

NOTE: If an error message appears on the control panel display, see **Chapter 5: Troubleshooting**.

Installing Two Paper Feeders

Use the following procedure to install two paper feeders:

1. Remove the paper feeders from their packaging and remove any packing tape or cardboard inserts. Set aside the small plastic bags, each containing two thumbscrews.

2. Place one paper feeder on a sturdy, level surface.

3. Remove the paper trays from both paper feeders.

NOTE: Do not move the printer when the paper feeder is installed.

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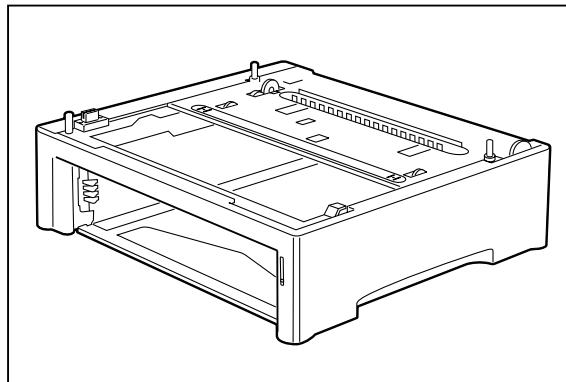
4. Align the three holes on the bottom of the upper feeder with the three stubs on the lower feeder, and place the upper paper feeder on top of the lower paper feeder.
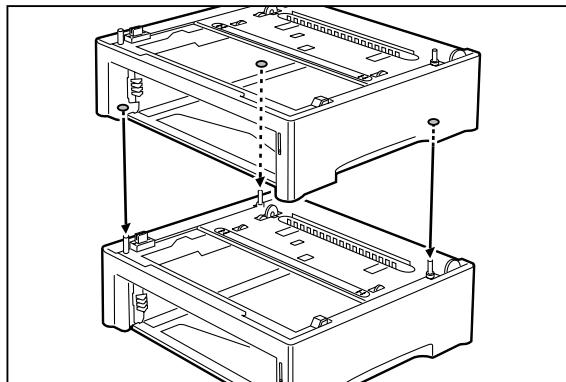
5. Insert the two thumbscrews supplied with the paper feeder into the two holes on the base of the upper paper feeder and turn them until tight.
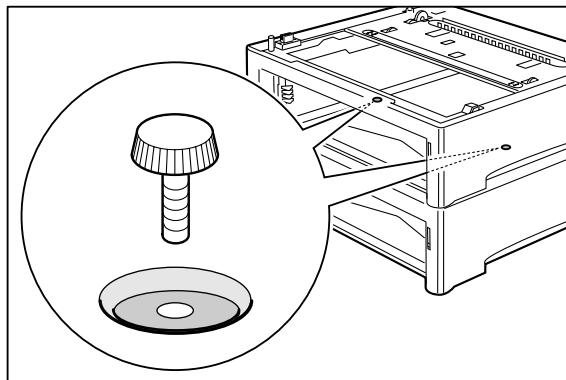
6. Turn the printer off by pressing [O] on the power switch on the right side of the unit, and disconnect the power cord from the AC outlet.
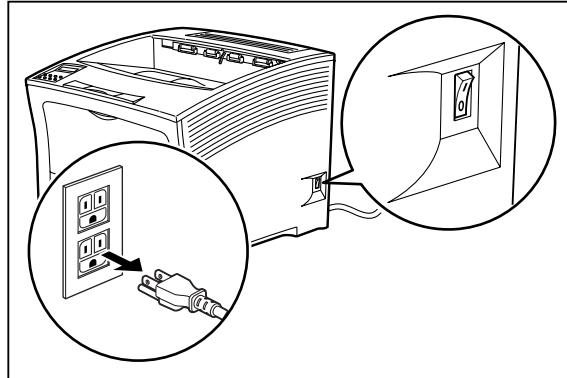

NOTE: Installing the paper feeder while the printer is on may damage the printer or the paper feeder.

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7. Close the front paper tray, remove any printed sheets from the output paper tray, and close the top cover.
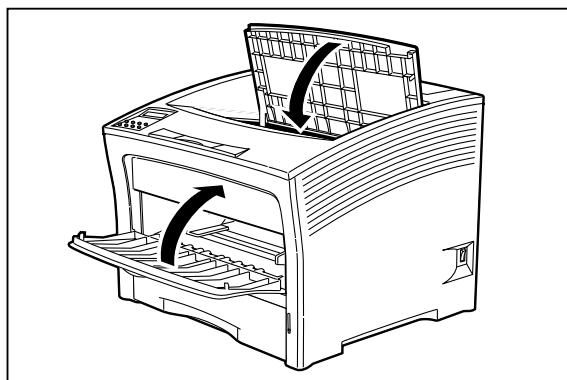
8. Remove the main paper tray from the printer.
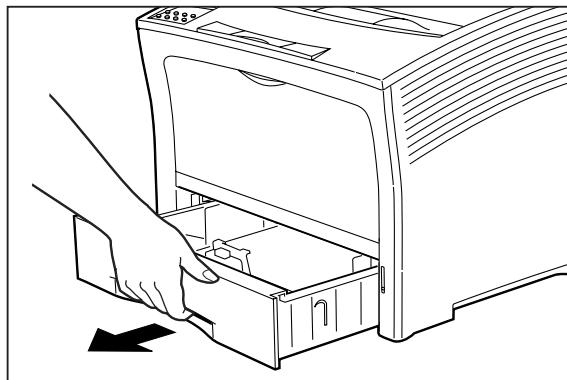
9. Lift the printer and lower it onto the two stacked paper feeders, aligning the three stubs on the upper paper feeder with the holes on the bottom of the printer.
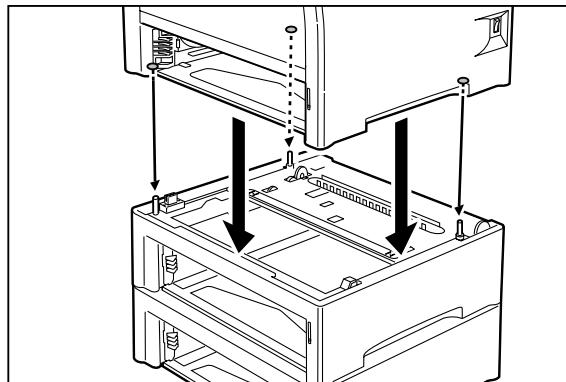

**NOTE:**   Be sure to lower the printer gently. Components inside the printer may be damaged by lowering it quickly.

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10. Insert the two thumbscrews supplied with the paper feeder into the holes on the base of the printer.
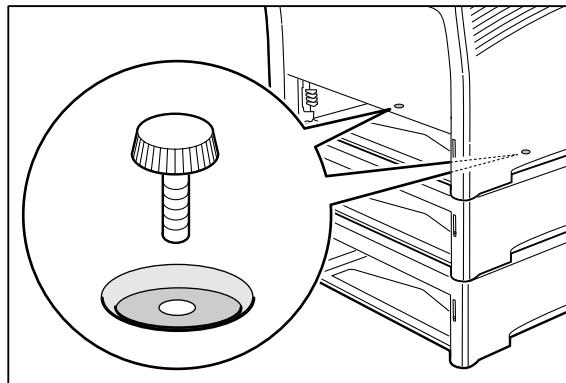
11. Load paper into the paper trays for both paper feeders.
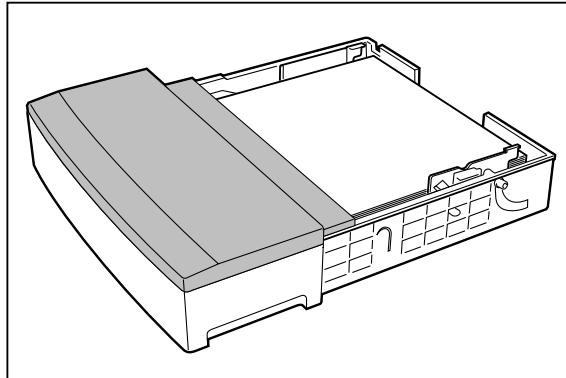
12. Insert the paper trays all the way into the paper feeders, making sure each tray is properly seated.
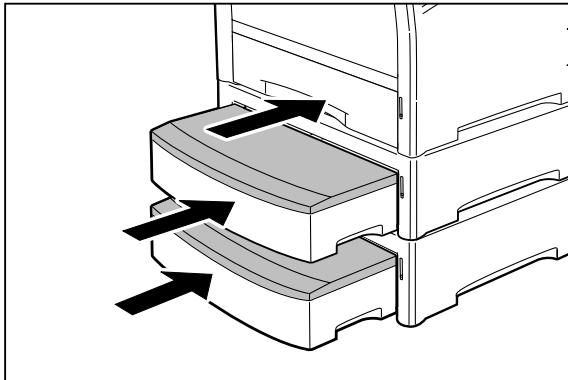
13. Insert the plug of the power cord into the AC outlet, and turn the printer on by pressing [I] on the power switch on the right side of the printer.


NOTE: If an error message appears on the control panel display, see "Warning Messages and Error Messages" on page 5-39.the Chapter titled "Error Messages" in the User Manual.

Testing the 500 Sheet Feeder

After installing the 500 sheet paper feeder, use the following test procedure to verify that the feeder is operating correctly.

1. Turn the printer on by pressing the [I] on the power switch on the right side of the printer.

2. Once the printer has warmed up and displays the "**Ready**" message on the control panel display, use any software application to print a few sheets from each of the feeder trays.

3. If the feeder does not feed paper or if the control panel displays an error message, refer to"**Solving 500 Sheet Feeder Problems" on page 7-16**.

Selecting Print Media

Your printer can print on a variety of media, including plain paper, labels, transparencies, and envelopes. Always use print media that meet the guidelines for use with this printer. Print media that is not recommended for use with this printer may cause frequent paper jams or poor print quality.

Paper and Print Media To Avoid

Do not use paper or print media that has any of the following characteristics:

• Does not meet the paper and media size and weight specifications for this printer
• Is not labeled for use with xerographic printers or xerographic copiers
• Cannot withstand temperatures of up to 310°F/155°C
• Is in a sealed package that is obviously damaged or wet
• Is excessively wrinkled, curled, torn, or warped
• Is folded or creased

- Has either an extremely slick surface or an extremely textured surface
- Has an exposed adhesive surface
- Has paper pieces glued or taped to the media
- Has staples or paper clips attached
- Is categorized as thermal paper, coated paper, or carbon paper
- Is an envelope that is embossed, is made of extremely thick paper, or is padded
- Is an envelope that has metal clasps
- Is a sheet of labels that has the backing sheet exposed between individual labels

Correct Paper Storage

It is important to store paper correctly prior to placing it in the printer, since improper storage can cause frequent paper jams and poor print quality. Use the following guidelines when storing paper for use in the printer:

- Store reams of paper on a flat surface, and always store them stacked horizontally.
- Store reams of paper in an area away from both direct sunlight and high humidity
- Open sealed reams only when you are ready to load the paper into the paper tray, and always close and seal partial reams of paper.
- Do not stack partial reams of paper

Print Media Weight, Type, and Size

The following table defines print media that you can use in each of the two available 500 sheet feeder paper trays, and also indicates the feed orientation—long edge feed (LEF) or short edge feed (SEF). If you have concerns about a specific brand or type of media, try samples of the media to determine if the resulting printer performance and print quality meet your expectations.

Paper Source	Weight	Paper Type and Feed Direction	Paper Sizes Accommodated
Letter/A4 Paper Tray (main tray and optional 500 sheet A4/Letter paper feeder)	16 to 24 lbs. 64 to 200g/m^2	A4 LEF	297 x 210mm 11.7 x 8.27 inches
		Letter LEF	279.4 x 215.9mm 8.5 x 11 inches
		Executive LEF	266.7 x 184.5mm 10.5 x 7.26 inches
		Monarch LEF (envelope)	190.5 x 98.4mm 7.5 x 3.87 inches
		Statement LEF	215.9 x 139.7mm 8.5 x 5.5 inches
		Com 10 LEF (envelope)	241.3 x 104.8mm 9.5 x 4.13 inches
		B5 LEF	257 x 182mm 10.1 x 7.2 inches
		A5 LEF	210 x 149mm 8.27 x 5.9 inches
		A6 LEF	100 x 148mm 3.94 x 5.83 inches
		C5 LEF (envelope)	229 x 162mm 9 x 6.4 inches
		DL LEF (envelope)	220 x 110mm 8.67 x 4.3 inches

Paper Source	Weight	Paper Type and Feed Direction	Paper Sizes Accommodated
A3 Paper Tray (optional 500 sheet A3/Ledger paper feeder)	16 to 24 lbs. 60 to 135 g/m^2	A4 LEF/SEF	297 x 210mm 11.7 x 8.27 inches
		Letter LEF/SEF	279.4 x 215.9mm 11 x 8.5 inches
		Legal 13" SEF	330.2 x 215.9mm 13 x 8.5 inches
		Legal 14" SEF	355.6 x 215.9mm 14 x 8.5 inches
		A3 SEF	420 x 297mm 16.5 x 11.7 inches
		B4 SEF	364 x 257mm 14.3 x 10.1 inches
		Statement LEF	215.9 x 139.7mm 8.5 x 5.5 inches
		Executive LEF	266.7 x 184.5mm 10.5 x 7.26 inches
		Ledger SEF	431.8 x 279.4mm 11 x 17 inches
		B5 LEF	257 x 182mm 10.1 x 7.2 inches
		A5 LEF	210 x 149mm 8.27 x 5.9 inches

Loading Print Media

Loading the A4/Letter or A3/Ledger Paper Tray

The 500-sheet A4/letter paper tray and A3/Ledger each have two length guides that are located on the sides of the tray, and one width guide that is located near the center of the tray. These guides allow you to adjust the size of the area that holds paper.

NOTE: The procedure for loading paper shown below illustrates the process using the A4/letter paper tray; however, the procedure is the same for the A3/ledger paper tray.

Use the following procedure to load paper into the 500 sheet A4/letter or A3/ledger paper tray:
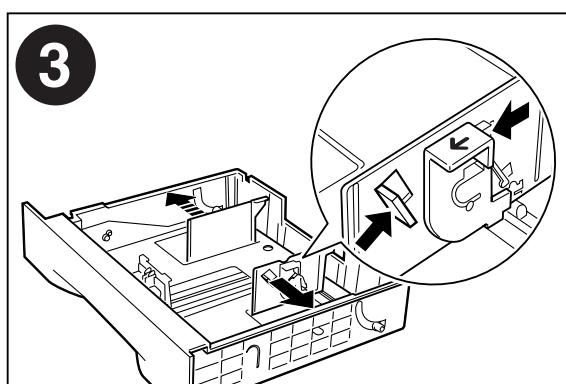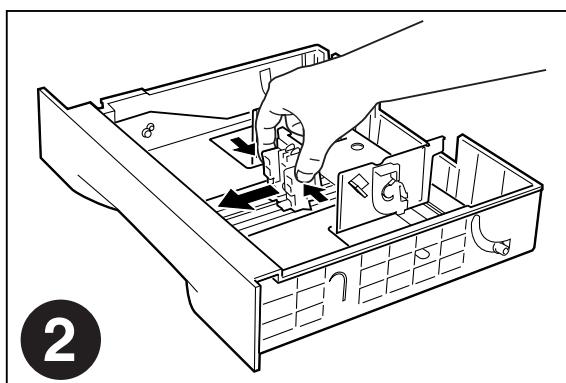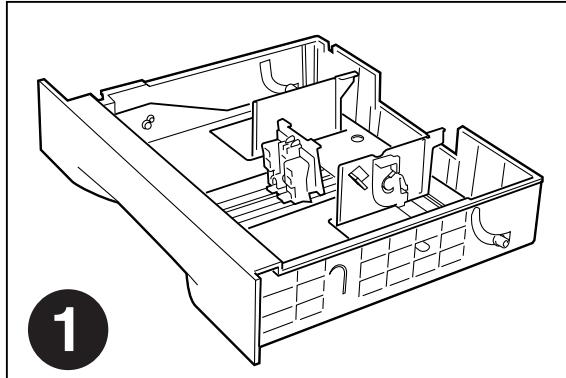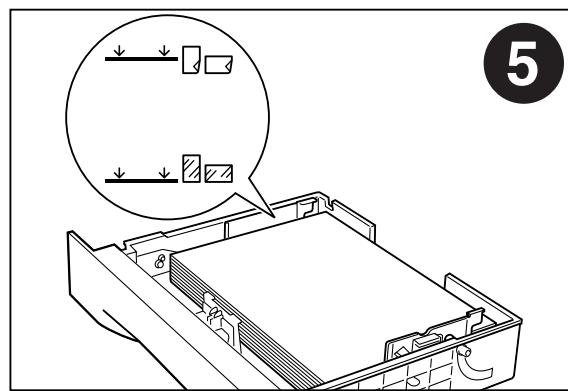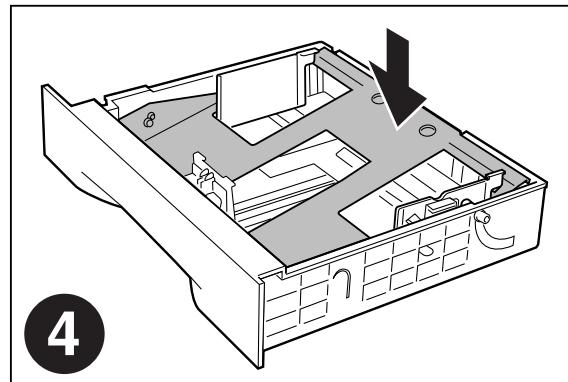
> ⚠️ CAUTION: Do not overload the tray, and make sure the paper stack is beneath the retaining clips on both sides of the tray. Fan paper before placing it in the tray, and place paper in the tray with the print side up.

NOTE: To avoid paper jams and other paper transportation problems, make sure the length and width guides are adjusted to match the paper size and are locked firmly into place.
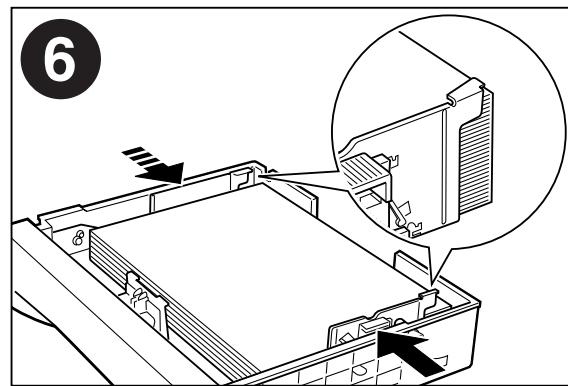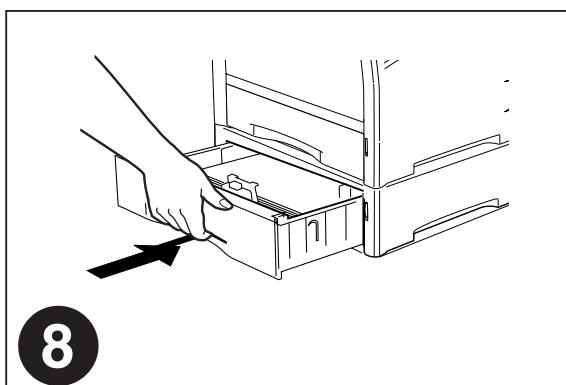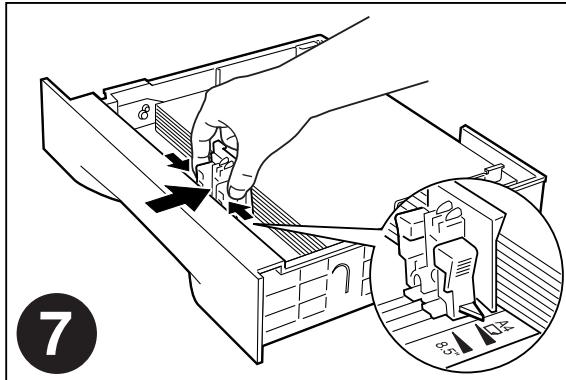
Solving 500 Sheet Feeder Problems

When there is a problem with the 500 sheet feeder, the printer control panel displays an error code and error message. Most paper feeder error codes indicate routine status conditions such as a paper tray running out of paper or a paper jam in a specific area of the paper feeder. Some error codes indicate much more serious problems that may require the help of a service technician.

- If the paper feeder is inoperative after installation, refer to "Installation Problems" on page 7-17 and complete the recommended procedure.

- If the printer control panel displays an error message or an error code, refer to "Interpreting Paper Feeder Error Messages" on page 7-17.

- If you have a paper feeder problem but the printer control panel does not display an error message or error code, refer to "Correcting Miscellaneous Paper Feeder Problems" on page 7-23 and follow the directions for correcting that problem.

Interpreting Paper Feeder Error Messages

The printer control panel displays error messages when there is a problem with the printer or any of the optional paper-handling components. The following table lists all of the error messages associated with the 500 sheet paper feeder, the possible cause of the error, and the action to take to correct the problem. If the control panel shows an error message that concerns another part of the printer, refer to **Chapter 5: Troubleshooting** for a complete list of all warning and error messages.

Error or Warning Message Line 1	Error or Warning Message Line 2	Possible Cause	Action
(Warning message, printer continues operating and line 1 shows printer status.)	Tray 2 Missing (applies to first paper feeder if installed)	Tray 2 is not installed.	Install the tray.
	Tray 3 Missing (applies to second paper feeder if installed)	Tray 3 is not installed.	Install the tray.
	Paper Low Tray 2 (applies to first paper feeder if installed)	Paper supply in tray 2 is low.	Add paper to the tray.
	Paper Low Tray 3 (applies to second paper feeder if installed)	Paper supply in tray 3 is low.	Add paper to the tray.
	Paper Out Tray 2 (applies to first paper feeder if installed)	There is no paper in tray 2.	Add paper to the tray.
	Paper Out Tray 3 (applies to second paper feeder if installed)	There is no paper in tray 3.	Add paper to the tray.
E1 JAM TRAY/REGI	Remove paper	There is a jam between the source tray and the registration sensor.	
E2-1 JAM MISFEED	Remove paper	There is a misfeed jam near the source paper tray.	Remove the jammed paper from the source tray.
LOAD PAPER TRAY2 (applies to first paper feeder if installed)	Paper Size/ Paper Type	Tray 2 is empty.	Load paper into the tray.
LOAD PAPER TRAY3 (applies to second paper feeder if installed)	Paper Size/ Paper Type	Tray 3 is empty.	Load paper into the tray.

Installation Problems

Simple oversights during installation may cause problems when you first use the paper feeder. If the paper feeder is inoperative after you have installed it, use the following procedure to check several possible causes.

1. Turn the printer off by pressing the [O] on the power switch on the right side of the printer.

2. Make sure that the feeder interface cables are firmly connected to the printer jacks.

   If the cables are firmly connected to the printer but the paper feeder is still inoperative, return to the installation procedure and carefully repeat all of the installation steps.

3. If the feeder is still inoperative after reinstallation, remove it from the printer so you can run tests on the printer alone.

4. Print a few sheets of paper through the main paper tray or the front tray to make sure the printer is still operational.

   • If the printer is operational when the feeder is not attached, contact either your sales representative or a service technician and report your problem.

   • If the printer is not operational when the feeder is not attached, refer to **Chapter 5: Troubleshooting**. After correcting the printer problem, return to **Chapter 7: Using the 500 Sheet Feeder** to reinstall the feeder.

Clearing an E1, E2-1 or E2-2 Paper Jam

If an E1, E2-1 or E2-2 error code precedes the error message on the first line of the control panel display, paper has jammed somewhere between the feed area and the registration sensor. Use the following procedure to clear a paper jam in this location:

1. Remove any printed pages from the output tray.

2. Open the top cover and the front tray cover.
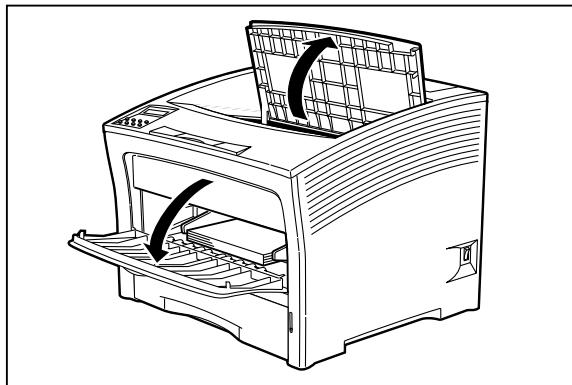
3. If the jam occurred while feeding from Tray 2 or 3, remove the paper tray associated with that feeder and inspect the inside of the paper tray well, removing any jammed paper.
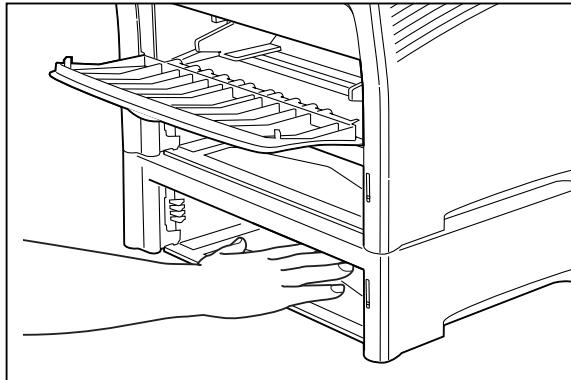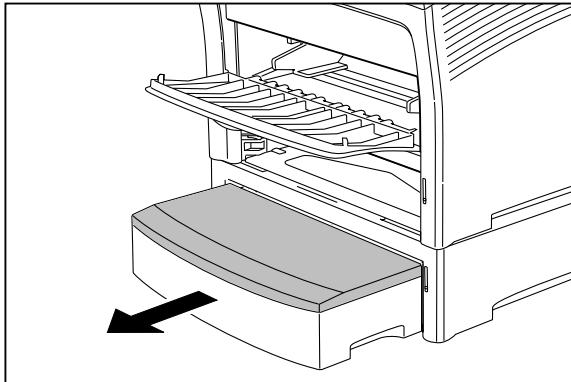
4. Open the rear door of the feeder for tray 2 or tray 3 and remove any jammed paper, then close the rear door of the feeder
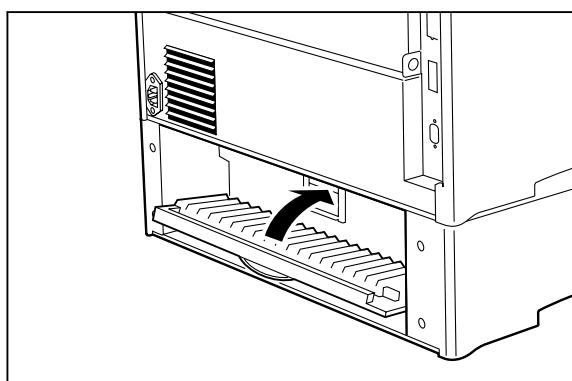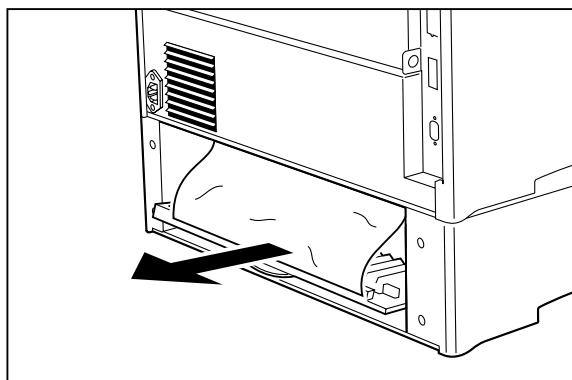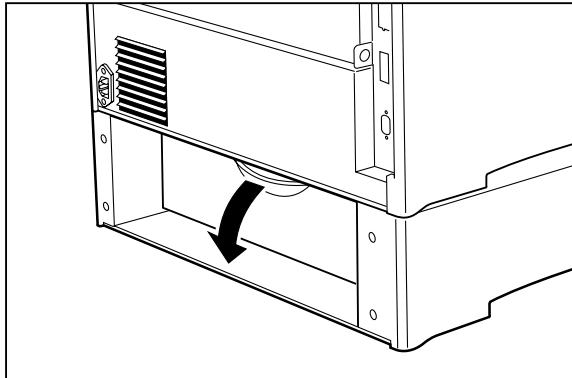
5. Remove the front tray by lifting up slightly and pulling the tray out from the printer.
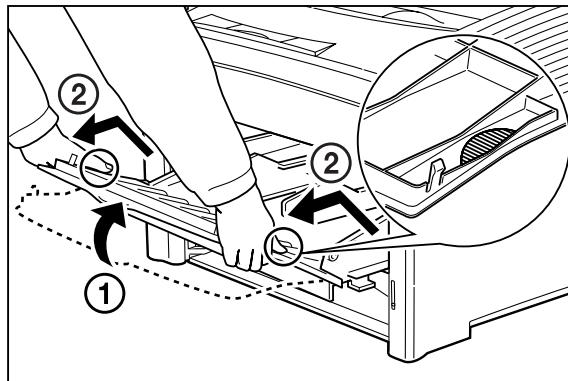
6. Remove the toner cartridge.
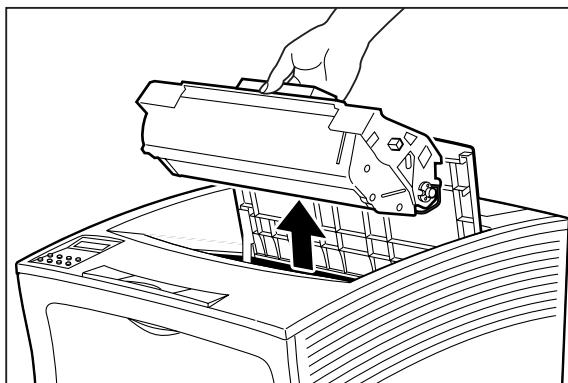
7. Remove any jammed paper from the toner cartridge well.
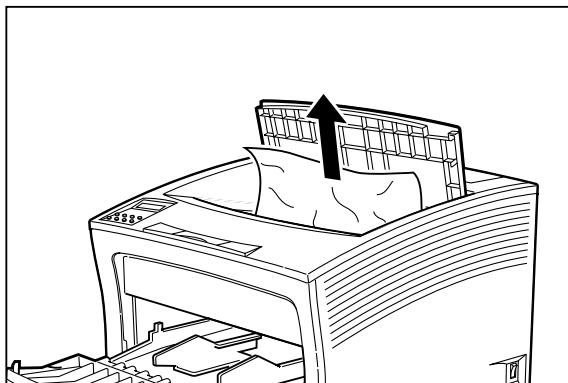
8. Reinsert the front tray into the printer.
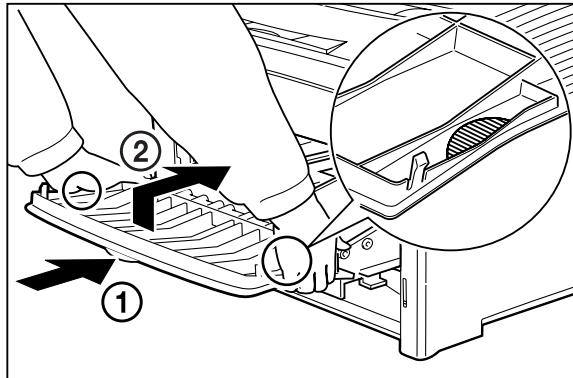
9. Reload any paper into the front tray.
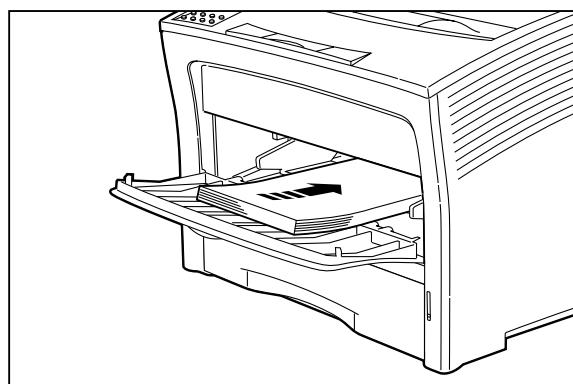
10. Close the front tray cover.
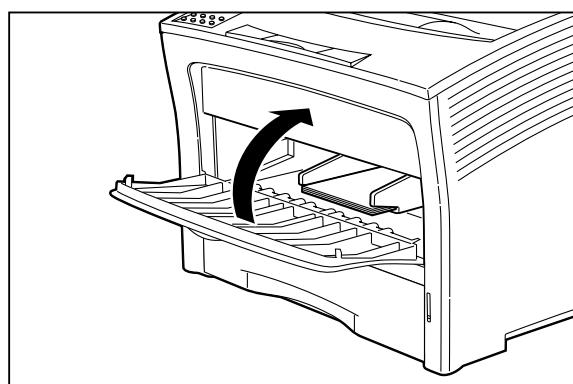
11. Slide the pegs on the toner cartridge into the channels on the inside of the printer, and lower the toner cartridge into the printer.
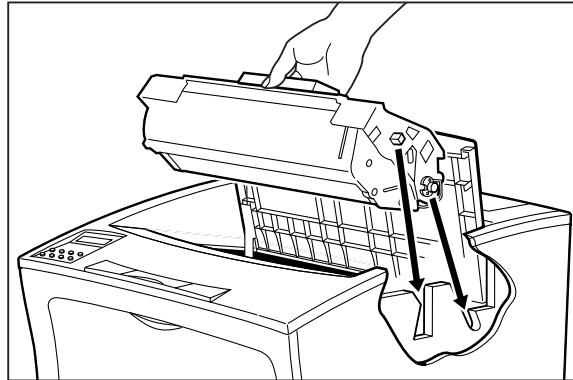
12. If you removed either tray 2 or tray 3, reinstall it.
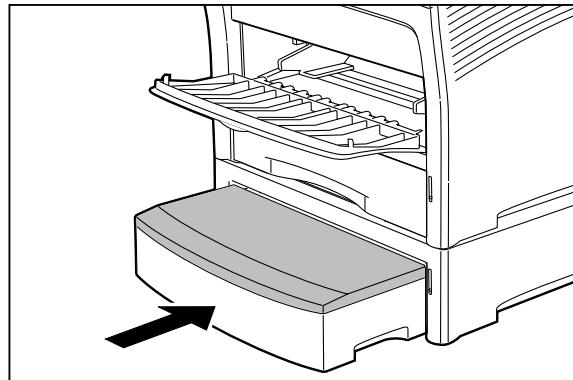
13. Close the top cover.
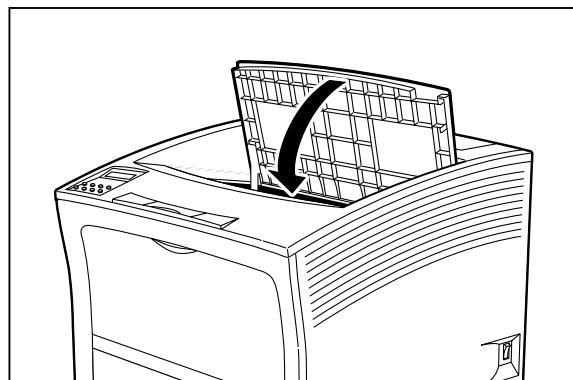
Correcting Miscellaneous Paper Feeder Problems

Some paper feeder problems may not cause an error message and may not interfere with the operation of the printer. If you are experiencing one of the problems listed below and there is no error message shown on the control panel display, refer to the procedures in the following sections to check the possible causes of the specific problem.

- Inoperative paper feeder
- Erratic operation
- Unusual noise

Inoperative 500 Sheet Paper Feeder

The following characteristics define this feeder problem:

- The feeder appears to be inoperative.
- When attempting to print from the feeder, the feeder does not respond and does not feed paper.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this feeder problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Open and then firmly close all of the printer and feeder doors and covers.

   Interlock switches monitor the position of printer doors and covers. When a door is closed, the interlock switch is activated and the feeder can operate. When a door is open, the interlock switch is not activated and the feeder cannot operate. If a door is not firmly closed, the interlock switch may not be fully activated—resulting in an inoperative feeder.

2. Test the printer by printing a few sheets from the main tray.

   If you cannot print a sheet of paper from the main tray and the printer does not display an error code, go to "Inoperative Printer" on page 5-3. If you can print a sheet of paper from the main tray, proceed to the next step.

3. Examine the printer driver settings to make sure the 500 sheet paper feeder is available as an installed option.

4. If the 500 sheet feeder is correctly set as an installed option, reload the printer driver software.

   The printer driver software running on the host computer may be damaged. Reinstalling the software is an easy and inexpensive way to isolate or eliminate the problem. Refer to the **DRIVERS** folder on the Electronic Library CD-ROM for detailed instructions on installing the driver.

5. Call your service technician.

   This problem may be caused by a malfunctioning or broken component that requires service.

Feeder Operates Erratically

The following characteristics define this feeder problem:

- The feeder does not function correctly.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this feeder problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Open and then firmly close all of the printer and feeder doors and covers.

   Interlock switches monitor the position of printer doors and covers. When a door is closed, the interlock switch is activated and the feeder can operate. When a door is open, the interlock switch is not activated and the feeder cannot operate. If a door is not firmly closed, the interlock switch can bounce between being activated and being not activated - confusing the system and causing erratic operation.

2. Reinstall the printer driver software.

   The printer driver software running on the host computer may be damaged. Reinstalling the software is an easy and inexpensive way to isolate or eliminate the problem. Refer to the **DRIVERS** folder on the Electronic Library CD-ROM for detailed instructions on installing the drivers.

3. Call your service technician.

   This problem may be caused by a malfunctioning or broken component that requires service.

Feeder Makes Unusual Noises

The following characteristics define this feeder problem:

- The feeder makes unusual noises or makes more noise than usual either while idle or while printing.
- The feeder feeds paper without a problem.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this feeder problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Remove the paper trays and inspect the inside of the feeder for jammed paper or obviously broken components.

   Broken components or scraps of paper lodged inside the feeder may be brushing against moving parts and causing the noise.

2. Call your service technician.

   This problem may be caused by a malfunctioning or broken component that requires service.

Maintaining the 500 Sheet Feeder

The 500 sheet feeder requires very little maintenance; however, normal daily use requires you to perform some routine maintenance including cleaning parts of the feeder.

Cleaning Feed Rolls

Rubber feed rolls drive sheets of paper out of the feeder paper trays into the printer. These feed rolls wear with normal use and eventually become coated with paper dust and must be cleaned. Frequent feed jams in the front tray or main tray indicate that the feed rolls need to be cleaned.

NOTE: The following procedure illustrates the process of cleaning the feed rolls for the main paper tray. To clean the feed rolls for a paper feeder, use the same procedure but remove the paper tray for the specific feeder that you are cleaning and clean the feed rolls in the paper tray well of that feeder.

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1. Turn the printer off by pressing the [O] on the power switch on the right side of the printer, and disconnect the AC power cord from the wall outlet.
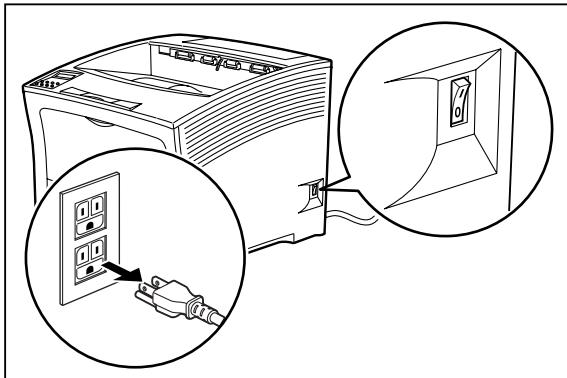
2. Remove the paper tray of the feeder that you intend to clean and set it on a flat level surface.
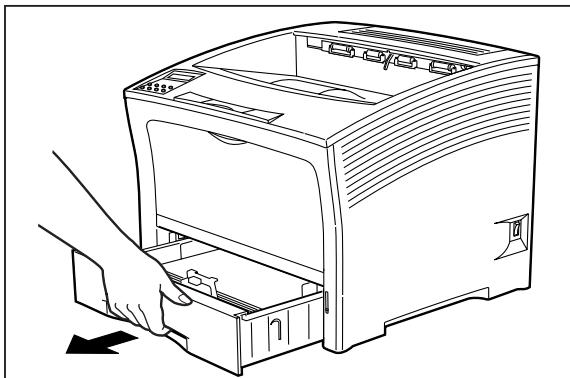
3. Reach into the feeder paper tray well and rotate the feed roll to the down position, as shown in the figure below.
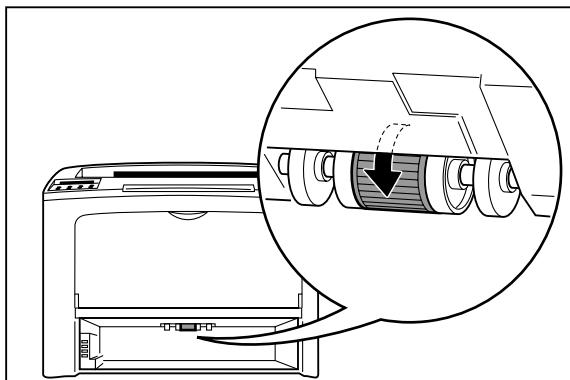
4. Using a soft cloth slightly moistened with plain water, carefully wipe the feed roll.

5. Rotate the feed roll back into the feed position.
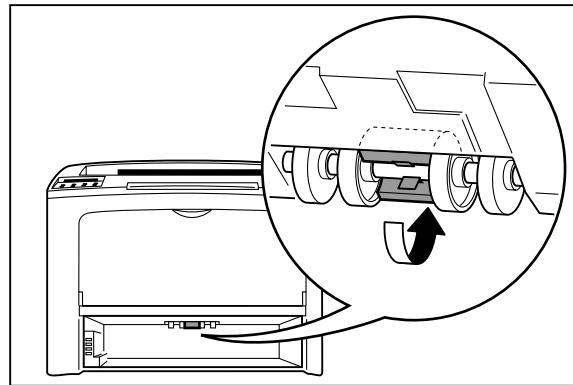
6. Reinstall the feeder paper tray.
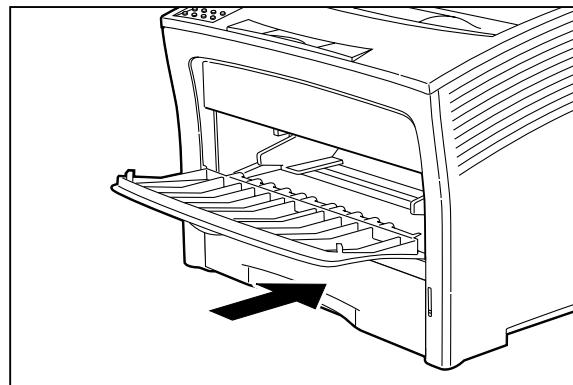
7. Verify that the power switch of the printer is in the [O] (off) position, then insert the plug of the power cord into the AC outlet.

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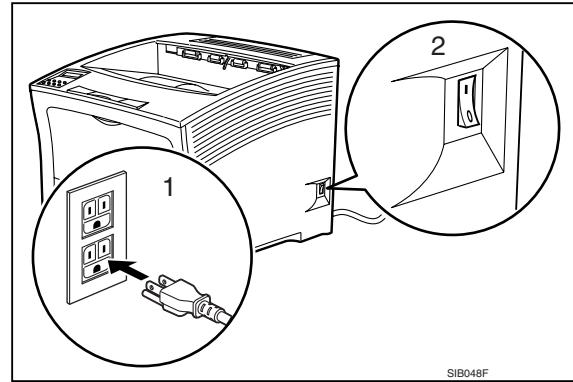
8. Turn the printer on by pressing [I] on the power switch on the right side of the printer.
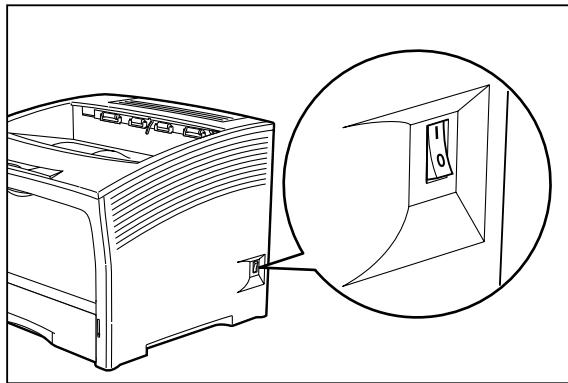
Moving the 500 Sheet Feeder

When moving the printer a short distance, you may leave the 500 sheet paper feeder attached. However, when moving the printer a long distance, please remove the 500-sheet paper feeder to avoid damaging either the printer or the feeder.

Moving the Printer and 500 Sheet Feeder a Short Distance

Use the following procedure to move the printer and 500 sheet feeder a short distance:

1. Turn the printer off by pressing the [O] on the power switch on the back of the printer.
2. Unplug the AC power cord from the AC wall outlet.
3. Disconnect the printer from the host computer.
4. Wait 30 minutes for the printer to cool.
5. Remove the toner cartridge and cover it with an opaque plastic sheet.
6. With the help of another person, carefully lift the printer and attached 500 sheet feeder and move them to the new location.
7. Once the printer is in the new location, refer to the **Installation Guide** included in the original printer packaging to reinstall the printer.

Moving the Printer and 500 Sheet Feeder a Long Distance

Use the following procedure to move the printer and 500 sheet feeder a long distance:

1. Turn the printer off by pressing the [O] on the power switch on the right side of the printer.
2. Unplug the AC power cord from the wall outlet and from the back of the printer.
3. Disconnect the printer from the host computer.
4. Remove the paper from all of the paper trays.
5. Wait 30 minutes for the printer to cool.
6. Remove the main paper tray.
7. Reach inside the open top tray and locate the two thumbscrews that are at the front left and front right of the feeder.

8. Unscrew the two thumbscrews to release the feeder from the printer.

9. Lift the printer off of the 500 sheet feeder and place it on the floor or on a table.

10. Repack the feeder in the original shipping box.

11. Remove the toner cartridge and place it in an opaque plastic bag, then seal the bag with tape and place it in a sturdy box.

12. Repack the printer, paper trays, AC power cord and toner cartridge into the original shipping box or boxes.

13. Once the feeder is in the new location, refer to"Installing the 500 Sheet Paper Feeders" on page 7-3 to reinstall the paper feeder(s).

◆ ◆ ◆

Chapter 8

Using the High Capacity Feeder

In this Chapter . . .

About this Chapter

This chapter provides all of the information necessary to install, use, and maintain the high capacity feeder, including procedures for cleaning the feeder and removing paper jams.

About the High Capacity Feeder

The High Capacity Feeder is an optional single-tray paper feeder that attaches under the printer. The tray holds a maximum of 2,000 sheets of standard weight paper in either A4 or Letter size. The printer supplies all of the operating power that is needed by the high capacity feeder. Motors and circuit boards internal to the high capacity feeder provide the feeder with drive and operational logic.

At the start of a print run the high capacity feeder motor switches on and begins to feed a sheet of paper out of a selected tray. Rubber rollers drive the sheet out of the tray, through the high capacity feeder, and into the printer. Sensors monitor the progress of the paper as it travels through the high capacity feeder. The high capacity feeder can be installed with either the Printer, or the Printer and one additional 500 Sheet Feeder (optional), as shown below.
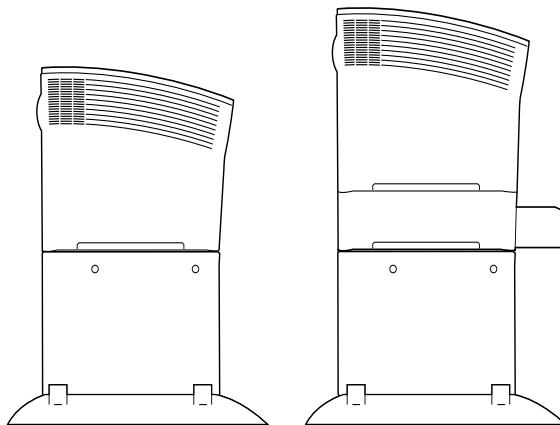
Major Components of the High Capacity Feeder

The following illustration shows the major components of the high capacity feeder:
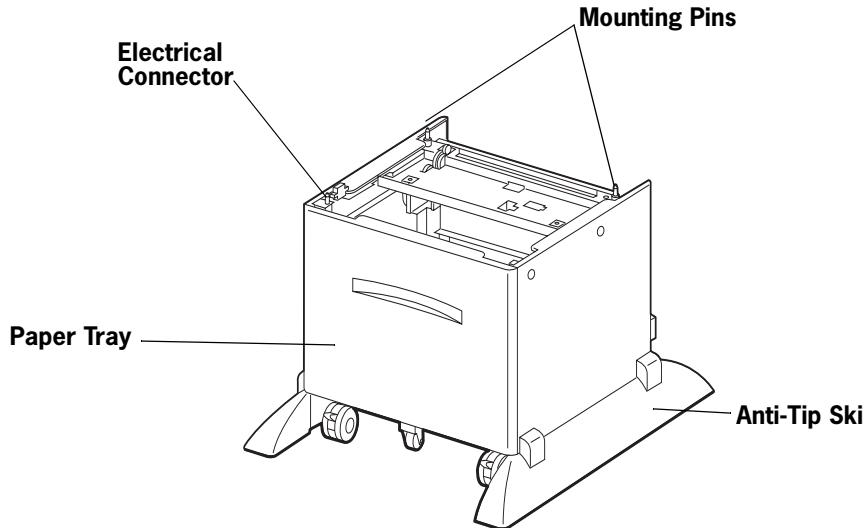
Installing the High Capacity Feeder

Before installing the high capacity feeder, verify that you have received the following items in the shipping box:
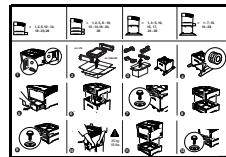
Installation Sheet
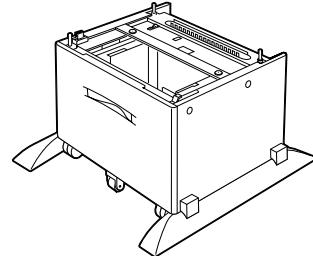
2 Thumbscrews

High Capacity Feeder

Installing the High Capacity Feeder with a Paper Feeder

Use the following procedure to install the high capacity feeder and a paper feeder together:.

WARNING: Before installing any options, turn the printer off by pressing [O] on the power switch on the right side of the unit and disconnect the power cord from the AC outlet. These precautions are necessary to avoid the risk of electric shock.

1. Turn the printer off by pressing [O] on the power switch on the right side of the unit, and disconnect the power cord from the AC outlet.
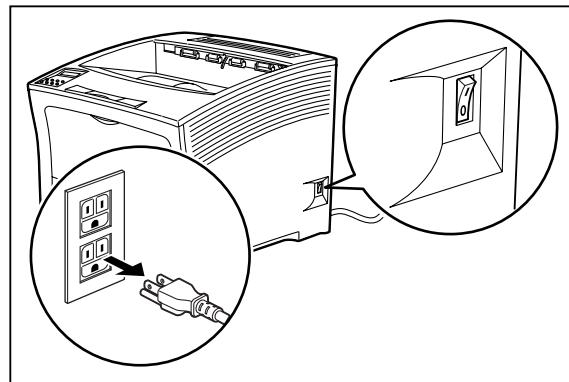
NOTE: Installing the high capacity feeder while the printer is on may damage the printer or the high capacity feeder.

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2. Remove the high capacity feeder from its packaging and place it on a level surface. Remove any cardboard inserts and packing tape. Set aside the small plastic bag containing two thumb-screws.
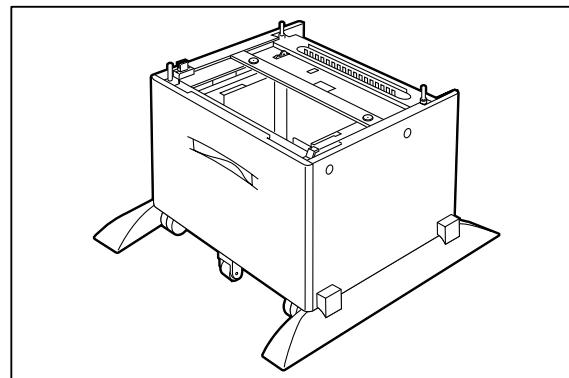
3. Lock both front casters of the high capacity feeder.
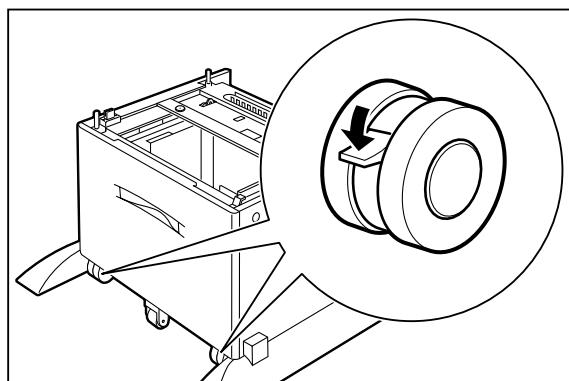
4. Remove the paper feeder from its packaging and remove any packing tape or cardboard inserts. Set aside the small plastic bag containing two thumbscrews.

5. Remove the paper tray from the printer and from the paper feeder.
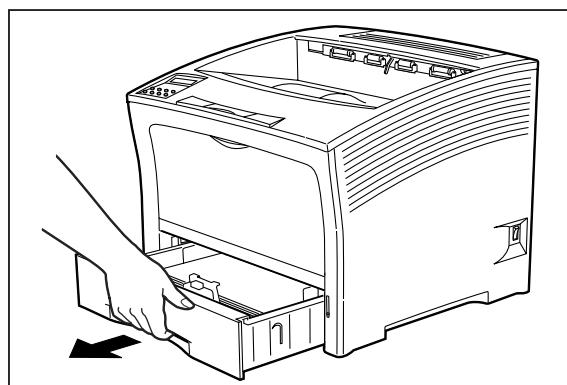
6. Align the three small holes on the bottom of the paper feeder with the metal stubs on top of the high capacity feeder, and place the paper feeder on top of the high capacity feeder.
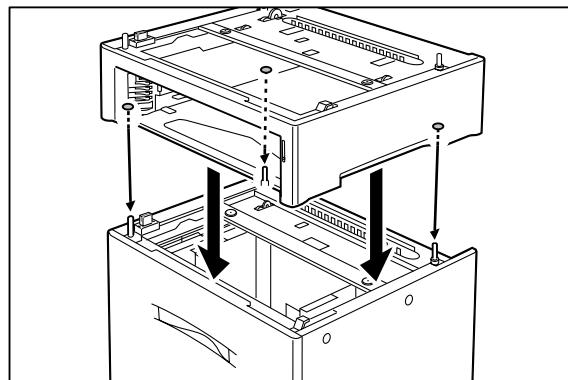
7. Insert the two thumbscrews supplied with the high capacity feeder into the holes on the base of the paper feeder and turn them until tight.
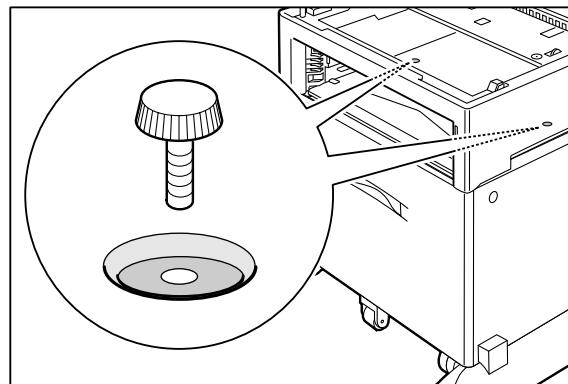
8. Align the small holes on the bottom of the printer with the metal stubs on top of the paper feeder, and lower the printer onto the paper feeder.
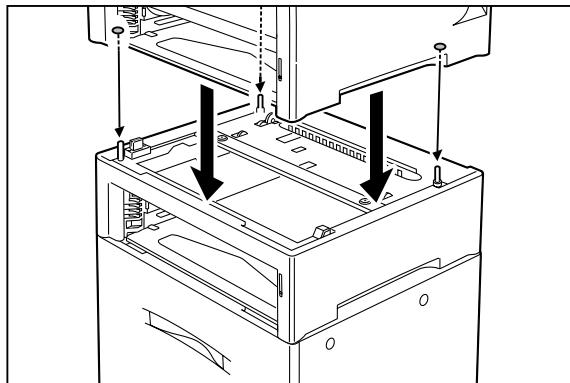
9. Insert the two thumbscrews supplied with the paper feeder into the holes on the base of the printer and turn them until tight.
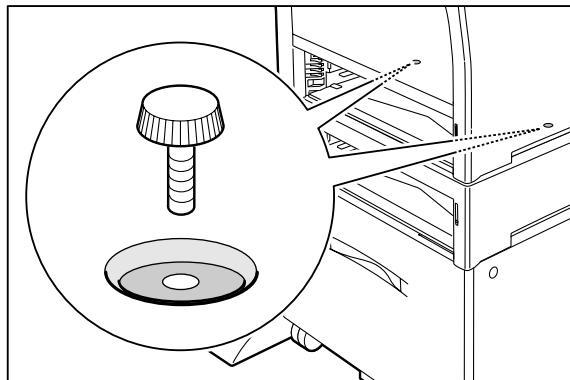
10. Load paper into the high capacity feeder.

NOTE: For details on how to load paper, see "Loading Paper into the High Capacity Feeder" on page 8-11.
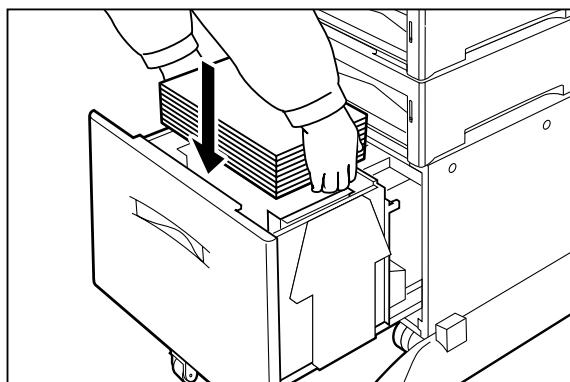
11. Insert the plug of the power cord into the AC outlet, and turn the printer on by pressing [I] on the power switch on the right side of the printer.

12. Check the display to make sure the printer is ready for printing.

NOTE: If an error message is shown when you turn on the printer, see "Warning Messages and Error Messages" on page 5-39.

Installing Only the High Capacity Feeder

Use the following procedure to install the high capacity feeder:

WARNING: Before installing any options, turn the printer off by pressing [O] on the power switch on the right side of the unit and disconnect the power cord from the AC outlet. These precautions are necessary to avoid the risk of electric shock.

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1. Turn the printer off by pressing [O] on the power switch on the right side of the unit, and disconnect the power cord from the AC outlet.
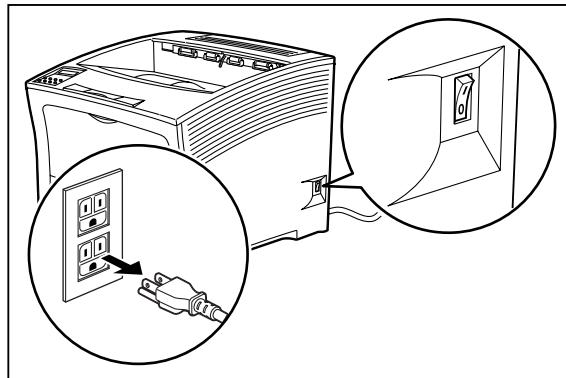
> **NOTE:** Installing the high capacity feeder unit while the printer is on may damage the printer or the high capacity feeder.

2. Remove the high capacity feeder from its packaging and place it on a level surface. Remove any cardboard inserts and packing tape. Set aside the small plastic bag containing two thumb-screws.
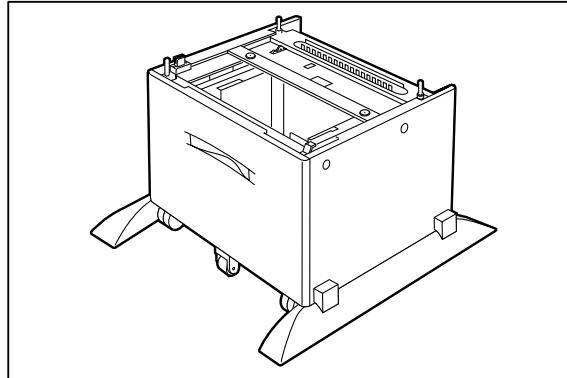
3. Lock both front casters of the high capacity feeder.
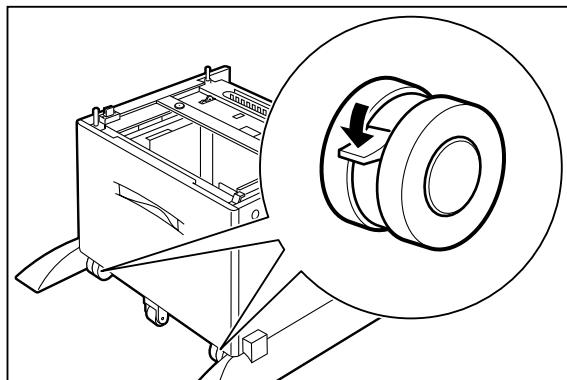
4. Remove the paper tray from the printer.
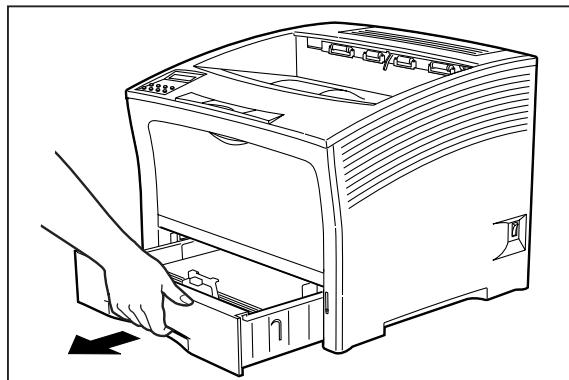
5. Align the three small holes on the bottom of the printer with the metal stubs on top of the high capacity feeder, and place the printer on top of the high capacity feeder.
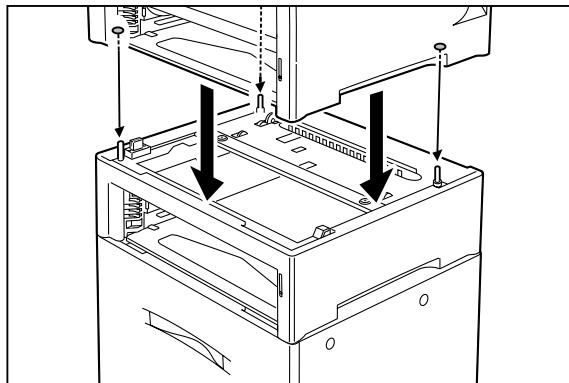
6. Insert the two thumbscrews supplied with the high capacity feeder into the holes on the base of the printer and turn them until tight.

7. Load paper into the high capacity feeder.

NOTE: For details on how to load paper, see .

8. Insert the plug of the power cord into the AC outlet, and turn the printer on by pressing [I] on the power switch on the right side of the printer.

9. Check the display to make sure the printer is ready for printing.

NOTE: If an error message is shown when you turn on the printer, see the Chapter 5: Troubleshooting.

Testing the High Capacity Feeder

After installing the high capacity feeder, use the following test procedure to verify that the feeder is operating correctly.

1. Turn the printer on by pressing the [I] on the power switch on the right side of the printer.

2. Once the printer has warmed up and displays the "**Ready**" message on the control panel display, use any software application to print a few sheets from the high capacity feeder.

3. If the feeder does not feed paper or if the control panel displays an error message, refer to"**Solving High Capacity Feeder Problems" on page 8-13**.

Selecting Print Media

Your printer can print on a variety of media, including plain paper, labels, transparencies, and envelopes. Always use print media that meet the guidelines for use with this printer. Print media that is not recommended for use with this printer may cause frequent paper jams or poor print quality.

Paper and Print Media To Avoid

Do not use paper or print media that has any of the following characteristics:

- Does not meet the paper and media size and weight specifications for this printer
- Is not labeled for use with xerographic printers or xerographic copiers
- Cannot withstand temperatures of up to 310°F/155°C
- Is in a sealed package that is obviously damaged or wet
- Is excessively wrinkled, curled, torn, or warped
- Is folded or creased
- Has either an extremely slick surface or an extremely textured surface
- Has an exposed adhesive surface
- Has paper pieces glued or taped to the media
- Has staples or paper clips attached
- Is categorized as thermal paper, coated paper, or carbon paper
- Is an envelope that is embossed, is made of extremely thick paper, or is padded
- Is an envelope that has metal clasps
- Is a sheet of labels that has the backing sheet exposed between individual labels

Correct Paper Storage

It is important to store paper correctly prior to placing it in the printer, since improper storage can cause frequent paper jams and poor print quality. Use the following guidelines when storing paper for use in the printer:

- Store reams of paper on a flat surface, and always store them stacked horizontally.
- Store reams of paper in an area away from both direct sunlight and high humidity
- Open sealed reams only when you are ready to load the paper into the paper tray, and always close and seal partial reams of paper.
- Do not stack partial reams of paper

Print Media Weight, Type, and Size

The following table defines print media that you can use in the high capacity feeder, and also indicates the feed orientation—long edge feed (LEF) or short edge feed (SEF). If you have concerns about a specific brand or type of media, try samples of the media to determine if the resulting printer performance and print quality meet your expectations.

Paper Source	Weight	Paper Type and Feed Direction	Paper Sizes Accommodated
High Capacity Feeder	16 to 24 lbs. 60 to 135 g/m^2	A4 LEF	297 x 210mm 11.7 x 8.27 inches
		Letter LEF	279.4 x 215.9mm 11 x 8.5 inches

Loading Paper into the High Capacity Feeder

Use the following procedure to load paper into the high capacity feeder:

NOTE: The high capacity feeder accommodates only A4 or letter size paper.

1. Pull the high capacity feeder tray out until it stops. Do not reach into the tray with your hand until the tray is completely lowered.
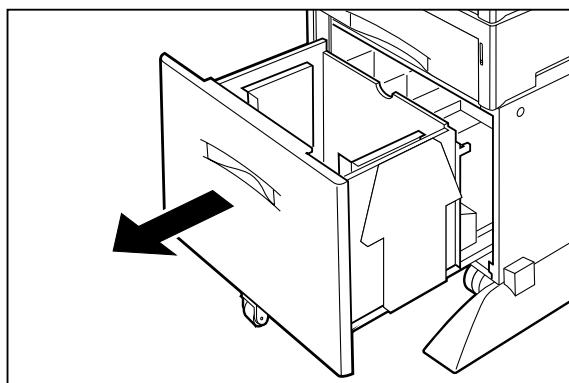
2. Adjust the paper guides to fit the desired paper size by lifting the paper guides and inserting them into the appropriate guide holes.
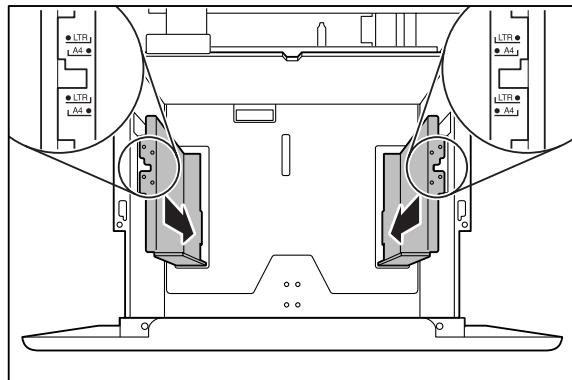
3. Hold a stack of paper with both hands as illustrated in the figure below.
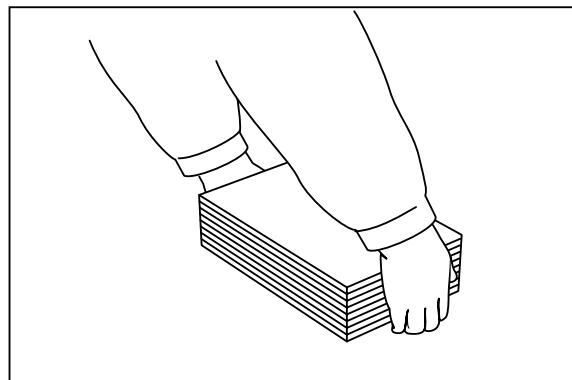
4. Gently place the paper into the paper tray. Make sure the paper stack does not exceed the maximum paper level shown on the high capacity feeder tray.
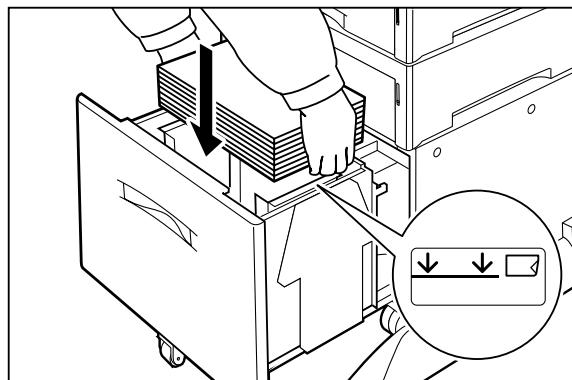
5. Push the paper tray all the way back into the high capacity feeder.
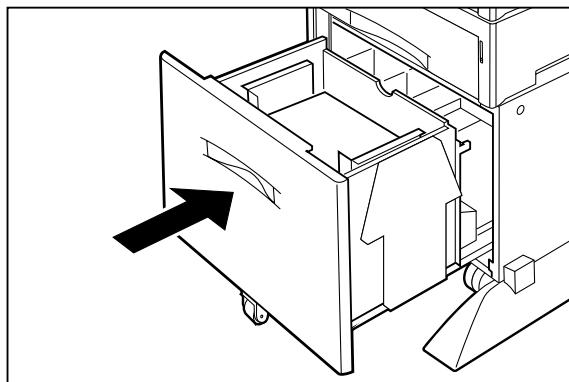
Solving High Capacity Feeder Problems

When there is a problem with the high capacity feeder, the printer control panel displays an error code and error message. Most high capacity feeder error codes indicate routine status conditions such as running out of paper or a paper jam. Some error codes indicate much more serious problems that may require the help of a service technician.

- If the high capacity feeder is inoperative after installation, refer to **"Installation Problems" on page 8-15** and complete the recommended procedure.

- If the printer control panel displays an error message or an error code, refer to **"Interpreting High Capacity Feeder Error Messages" on page 8-14**.

- If you have a high capacity feeder problem but the printer control panel does not display an error message or error code, refer to **"Correcting Miscellaneous High Capacity Feeder Problems" on page 8-17** and follow the directions for correcting that problem.

Interpreting High Capacity Feeder Error Messages

The printer control panel displays error messages when there is a problem with the printer or any of the optional paper-handling components. The following table lists all of the error messages associated with the high capacity feeder, the possible cause of the error, and the action to take to correct the problem. If the control panel shows an error message that concerns another part of the printer, refer to **Chapter 5: Troubleshooting** for a complete list of all warning and error messages.

Error or Warning Message Line 1	Error or Warning Message Line 2	Possible Cause	Action
(Warning message, printer continues operating and line 1 shows printer status.)	Tray 2 Missing (applies to HCF if no 500 sheet feeder is installed)	Tray 2 is not installed.	Install the tray.
	Tray 3 Missing (applies to HCF if one 500 sheet paper feeder is installed)	Tray 3 is not installed.	Install the tray.
	Paper Low Tray 2 (applies to HCF if no 500 sheet feeder is installed)	Paper supply in tray 2 is low.	Add paper to the tray.
	Paper Low Tray 3 (applies to HCF if one 500 sheet paper feeder is installed)	Paper supply in tray 3 is low.	Add paper to the tray.
	Paper Out Tray 2 (applies to HCF if no 500 sheet feeder is installed)	There is no paper in tray 2.	Add paper to the tray.
	Paper Out Tray 3 (applies to HCF if one 500 sheet paper feeder is installed)	There is no paper in tray 3.	Add paper to the tray.
	HCF Lifting	The high capacity feeder is lifting.	Wait until the HCF has finished lifting completely.
E0 JAM HCF	Remove paper	There is a jam at the high capacity feeder.	Remove the paper jam. See "Clearing a High Capacity Feeder Paper Jam" on page 8-15.
E5 COVER OPEN	Close HCF Cover	The HCF cover is open.	Close the HCF cover.
LOAD PAPER TRAY2 (applies to HCF if no 500 sheet feeder is installed)	Paper Size/ Paper Type	Tray 2 is empty.	Load paper into the tray.

Error or Warning Message Line 1	Error or Warning Message Line 2	Possible Cause	Action
LOAD PAPER TRAY3 (applies to HCF if one 500 sheet paper feeder is installed)	Paper Size/ Paper Type	Tray 3 is empty.	Load paper into the tray.
HCF UNIT FAILURE	Call Service	The HCF has failed.	Turn the printer off, then turn it on. If the problem reoccurs, contact an authorized service provider.

Installation Problems

Simple oversights during installation may cause problems when you first use the high capacity feeder. If the high capacity feeder is inoperative after you have installed it, use the following procedure to check several possible causes.

1. Turn the printer off by pressing the [O] on the power switch on the right side of the printer.

2. Make sure that the printer is properly seated on the high capacity feeder.

   If the printer is properly seated but the high capacity feeder is still inoperative, return to the installation procedure and carefully repeat all of the installation steps.

3. If the high capacity feeder is still inoperative after reinstallation, remove it from the printer so you can run tests on the printer alone.

4. Print a few sheets of paper through the main paper tray or the front tray to make sure the printer is still operational.

   - If the printer is operational when the high capacity feeder is not attached, contact either your sales representative or a service technician and report your problem.
   - If the printer is not operational when the high capacity feeder is not attached, refer to **Chapter 5: Troubleshooting** for procedures to correct printer problems. After correcting the printer problem, return to this chapter to reinstall the high capacity feeder.

Clearing a High Capacity Feeder Paper Jam

If an E0 error code precedes the error message on the first line of the control panel display, paper has jammed at the high capacity feeder. Use the following procedure to clear a paper jam in this location:

1. Pull the high capacity feeder paper drawer out.
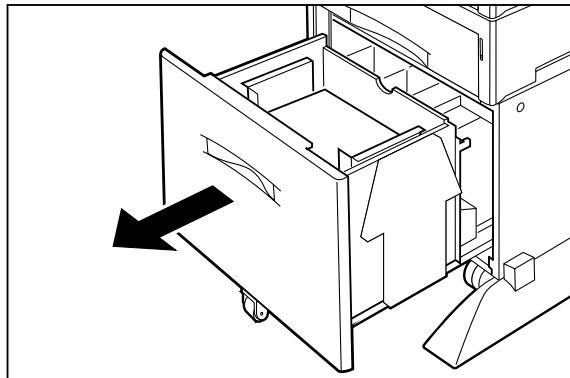
2. Remove any jammed paper from the paper drawer.
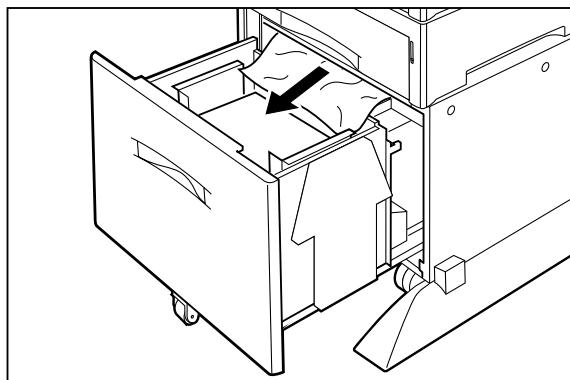
3. Remove the paper stack from the paper drawer.

4. Inspect the paper for any obvious signs of damage. If the paper is damaged, replace the entire stack with new, undamaged paper.

5. While the paper is out of the drawer, inspect the Feed Roll area of the high capacity feeder and remove any jammed paper from the rolls.

6. Push the paper drawer back into the high capacity feeder, making sure the drawer is properly closed.
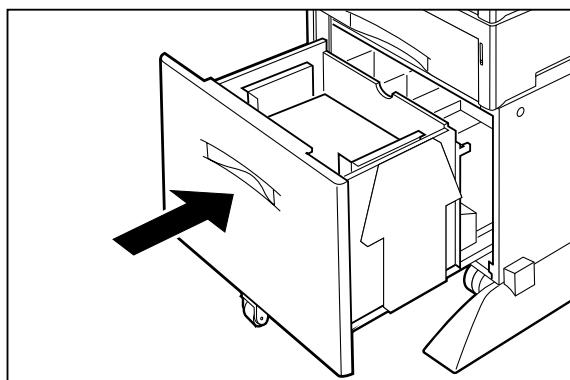
Correcting Miscellaneous High Capacity Feeder Problems

Some high capacity feeder problems may not cause an error message and may not interfere with the operation of the printer. If you are experiencing one of the problems listed below and there is no error message shown on the control panel display, refer to the procedures in the following sections to check the possible causes of the specific problem.

- Inoperative high capacity feeder
- Erratic operation
- Unusual noise

Inoperative High Capacity Feeder

The following characteristics define this feeder problem:

- The high capacity feeder appears to be inoperative.
- When attempting to print from the high capacity feeder, the high capacity feeder does not respond and does not feed paper.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this feeder problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Open and then firmly close all of the printer and feeder doors and covers.

   Interlock switches monitor the position of printer doors and covers. When a door is closed, the interlock switch is activated and the high capacity feeder can operate. When a door is open, the interlock switch is not activated and the high capacity feeder cannot operate. If a door is not firmly closed, the interlock switch may not be fully activated—resulting in an inoperative high capacity feeder.

2. Test the printer by printing a few sheets from the main tray.

   If you cannot print a sheet of paper from the main tray and the printer does not display an error code, go to "Inoperative Printer" on page 5-3. If you can print a sheet of paper from the main tray, proceed to the next step.

3. Examine the printer driver settings to make sure the high capacity feeder is available as an installed option.

4. If the high capacity feeder is correctly set as an installed option, reload the printer driver software.

   The printer driver software running on the host computer may be damaged. Reinstalling the software is an easy and inexpensive way to isolate or eliminate the problem. Refer to the **DRIVERS** folder on the Electronic Library CD-ROM for detailed instructions on installing the driver.

5. Call your service technician.

   This problem may be caused by a malfunctioning or broken component that requires service.

Feeder Operates Erratically

The following characteristics define this high capacity feeder problem:

- The high capacity feeder does not function correctly.
- The high capacity feeder does not feed paper, or feeds paper without a request.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this high capacity feeder problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Open and then firmly close all of the printer and high capacity feeder doors and covers.

   Interlock switches monitor the position of printer doors and covers. When a door is closed, the interlock switch is activated and the high capacity feeder can operate. When a door is open, the interlock switch is not activated and the high capacity feeder cannot operate. If a door is not firmly closed, the interlock switch can bounce between being activated and being not activated - confusing the system and causing erratic operation.

2. Reinstall the printer driver software.

   The printer driver software running on the host computer may be damaged. Reinstalling the software is an easy and inexpensive way to isolate or eliminate the problem. Refer to *t*he **DRIVERS** folder on the Electronic Library CD-ROM for detailed instructions on installing the drivers.

3. Call your service technician.

   This problem may be caused by a malfunctioning or broken component that requires service.

High Capacity Feeder Makes Unusual Noises

The following characteristics define this high capacity feeder problem:

- The high capacity feeder makes unusual noises or makes more noise than usual either while idle or while printing.
- The high capacity feeder feeds paper without a problem.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this high capacity feeder problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Remove the paper trays and inspect the inside of the high capacity feeder for jammed paper or obviously broken components.

   Broken components or scraps of paper lodged inside the high capacity feeder may be brushing against moving parts and causing the noise.

2. Call your service technician.

   This problem may be caused by a malfunctioning or broken component that requires service.

Maintaining the High Capacity Feeder

The high capacity feeder requires very little maintenance; however, with normal use you will need to perform some routine maintenance tasks such as cleaning the high capacity feeder and replacing certain components.

Cleaning the Interior of the High Capacity Feeder

Generally, the interior of the high capacity feeder seldom needs cleaning unless paper dust accumulation inside the high capacity feeder starts to cause recurring paper feed problems.

> ⚠️ Since there is always the possibility of damaging delicate high capacity feeder components by carelessness or by overly vigorous cleaning methods, we recommend that you clean the interior only when you are instructed to do so by a service representative or by a procedure presented in this manual.

1. Turn the printer off by pressing the [O] on the power switch on the right side of the printer.

2. Remove the plug of the AC power cord from the AC wall outlet.

3. Remove all paper from the high capacity feeder drawer.

4. Remove the paper drawer from the high capacity feeder by sliding the drawer out of the high capacity feeder and then raising the front of the tray to disengage it from the rails. Slide the drawer completely out of the high capacity feeder.

5. For minor cleaning, use a soft, dry cloth and carefully wipe only those areas of the high capacity feeder interior that appear to be dirty.

   For major cleaning, use a small vacuum cleaner with a disposable bag and crevice tool attachment. Use a soft-haired brush to dislodge dirt and sweep it into the vacuum nozzle.

6. Reload paper into the high capacity feeder drawer.

7. Raise the front of the high capacity feeder drawer while you slip the rear of the drawer into the rails on the sides of the high capacity feeder, then slide the drawer back into the high capacity feeder.

8. Insert the plug of the AC power cord into the AC wall outlet, and turn the printer on by pressing [I] on the power switch on the right side of the printer.

Cleaning the Exterior of the High Capacity Feeder

Through normal use the exterior of the high capacity feeder may become dirty or stained with toner. Although exterior dirt should not affect printer performance, an occasional exterior cleaning may be necessary to maintain the appearance of the high capacity feeder.

1. Turn the printer off by pressing [O] on the power switch on the right side of the printer.

2. Remove the plug of the AC power cord from the AC wall outlet.

3. Using a soft cloth, slightly damp with cold water, wipe the high capacity feeder covers and tray faces. Use a very mild, non-abrasive soap to remove heavy dirt and toner stains.

> **⚠ CAUTION: Do not use solvents or abrasive cleaners to clean high capacity feeder covers. Use only cold water and a very mild soap to clean covers.**

4. Using a soft, dry cloth, thoroughly dry the covers and tray faces.

5. Insert the plug of the AC power cord into the AC wall outlet, and turn the printer on by pressing [I] on the power switch on the right side of the printer.

Cleaning Feed Rolls

Rubber feed rolls drive sheets of paper out of the high capacity feeder paper tray into the printer. These feed rolls wear with normal use and eventually become coated with paper dust and must be cleaned. Frequent feed jams in the front tray or main tray indicate that the feed rolls need to be cleaned.

1. Turn the printer off by pressing the [O] on the power switch on the right side of the printer.

2. Unplug the AC power cord from the AC wall outlet.

3. Remove the paper drawer from the high capacity feeder.
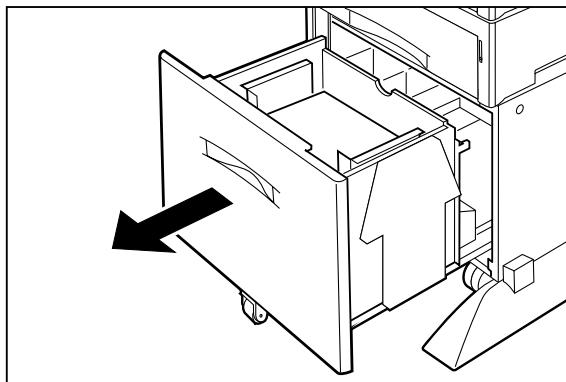
4. Look inside the empty paper tray cavity and locate the three rubber feed rolls.

5. Vigorously wipe the drive surface of each feed roll using a paper towel that is slightly damp with water.

> **⚠ Use only water to clean the feed rolls, do not use solvents or abrasive cleaners.**

6. Use a clean, dry paper towel and wipe each feed roll dry.

7. Push the paper drawer back into the high capacity feeder.

8. Connect the plug of the AC power cord into the AC wall outlet.

9. Turn the printer on by pressing the [I] on the power switch on the right side of the printer.

Moving the High Capacity Feeder

Moving the High Capacity Feeder a Short Distance

Use the following procedure to move the high capacity feeder a short distance:

1. Turn the printer off by pressing the [O] on the power switch on the right side of the printer.

2. Disconnect the plug of the AC power cord from the AC wall outlet.

3. Disconnect the printer from the host computer.

4. Wait 30 minutes for the printer to cool before moving the printer.

5. Remove the toner cartridge and cover it with an opaque plastic sheet.

6. Pull up on the wheel tabs to unlock the four caster wheels under the high capacity feeder.

7. Roll the printer and high capacity feeder to the new location.

8. Once the printer and high capacity feeder are in the new location, refer to the printer Installation Guide included in the original packaging to reinstall the printer.

Moving the High Capacity Feeder a Long Distance

1. Turn the printer off by pressing the [O] on the power switch on the right side of the printer.

2. Disconnect the plug of the AC power cord from the AC wall outlet, and disconnect the AC power cord from the printer.

3. Disconnect the printer from the host computer.

4. Wait 30 minutes for the printer to cool before moving the printer.

5. Pull up on the wheel tabs to unlock the four caster wheels under the high capacity feeder.

6. Roll the printer and high capacity feeder to a place where you can easily access all four sides.

7. Push down on the wheel tabs to lock the four high capacity feeder caster wheels.

8. Remove the paper tray from the printer

9. Remove the paper from the high capacity feeder paper trays.

10. Reach inside the open top tray and locate the two thumbscrews that are at the front left and front right of the high capacity feeder.

11. Unscrew the two thumbscrews to release the high capacity feeder from the printer.

12. With the help of another person, lift the printer off of the high capacity feeder and place it on the floor or on a strong table.

CAUTION: The printer is extremely heavy. Do not attempt to lift the printer by yourself.

13. Repack the high capacity feeder into the original shipping box.

> CAUTION: The high capacity feeder is heavy. Do not attempt to lift the high capacity feeder by yourself.

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14. Once the high capacity feeder is in the new location, refer to **"Installing the High Capacity Feeder" on page 8-3**.

◆ ◆ ◆

Chapter 9

Using the Offset Output Tray

In this Chapter . . .

About this Chapter

This chapter provides all of the information necessary to install, use, and maintain the **Offset Output Tray**, including procedures for cleaning and removing paper jams.

About the Offset Output Tray

The offset output tray is an optional output tray that attaches to the top rear of the printer and can hold up to 500 printed sheets. The printer supplies all of the operating power that is needed by the offset output tray. Motors and circuit boards internal to the offset output tray provide it with drive and operational logic.

The offset output tray can be installed with only the printer, or it may be installed with other paper-handling options.
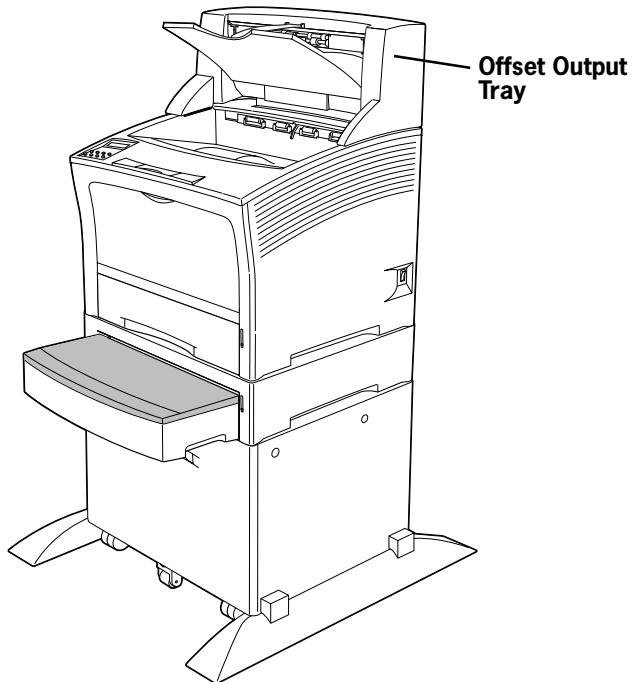
Figure 9-1: Offset Output Tray installed with other paper handling options.

Major Components of the Offset Output Tray

The following illustration shows the major components of the offset output tray:.
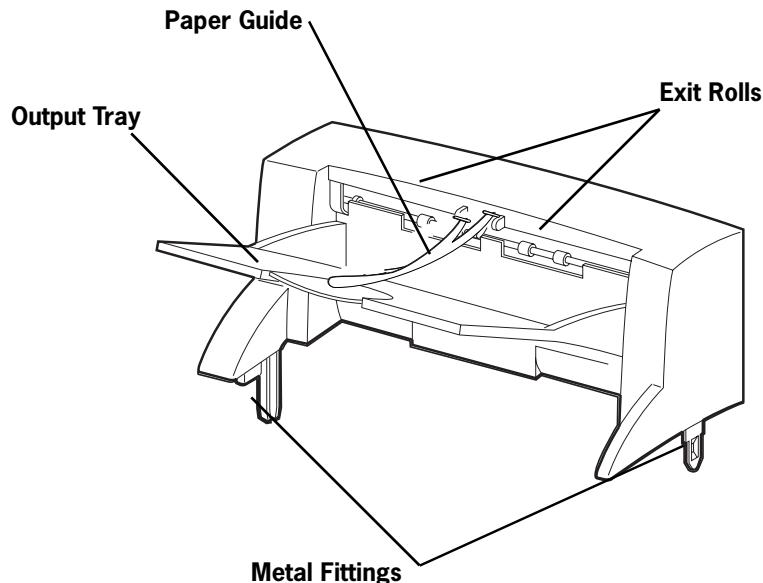
Figure 9-2: Offset Output Tray Major Components.

Installing the Offset Output Tray

Before installing the offset output tray, remove it from its packaging and verify that you have received the following items. If any of the items are missing or damaged, contact your dealer.
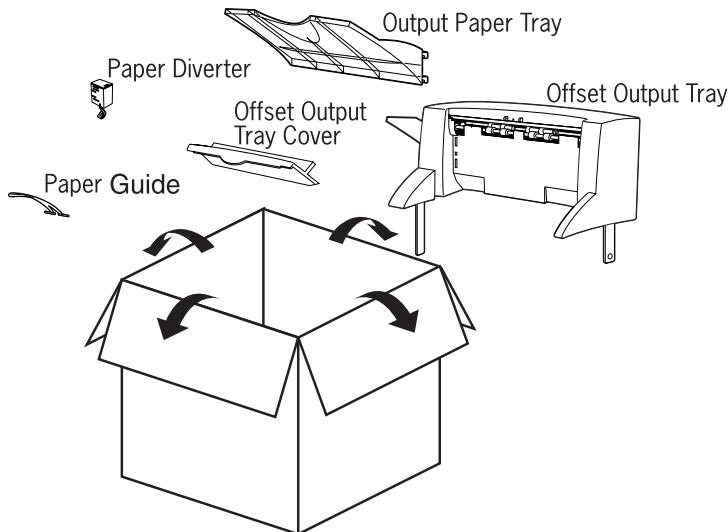
Throughout this procedure, the different sides of the printer are referred to as front, rear, left, and right. The front of the printer is the side that holds the control panel. The left and right sides are those to the left and right, respectively, of a person facing the front of the printer.

Use the following procedure to install the offset output tray:

1. Remove any cardboard inserts or packing tape from the interior and exterior of the offset output tray.

2. Turn the printer off by pressing [O] on the power switch on the right side of the unit, and disconnect the power cord from the AC outlet.

NOTE: Installing the offset output tray while the printer is on may damage the printer or the offset output tray.

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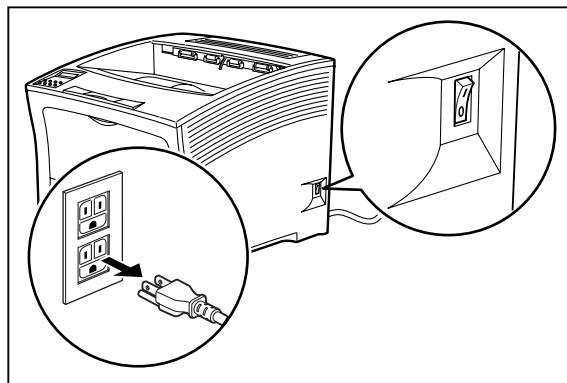
3. Insert coins or similar objects into the two spaces below the standard offset output tray cover, located at the rear of the top of the printer. Push down or twist the coins to release the cover, and remove the cover from the printer.
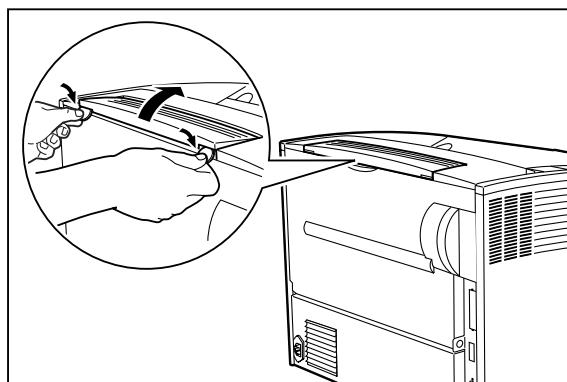
4. Install the cover supplied with the offset output tray in place of the standard cover. Align the tabs on the cover with the holes on the printer and snap the cover in place.
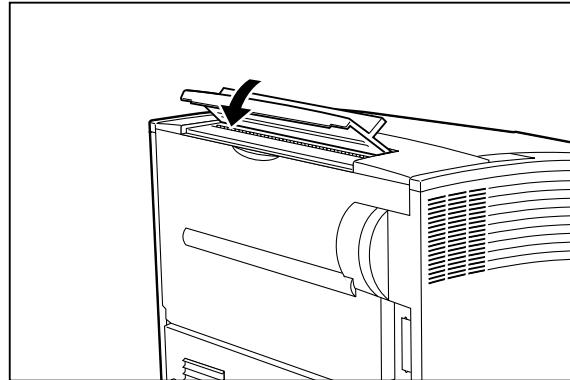
5. Pull on the recessed area near the top of the rear of the printer to open the rear cover.
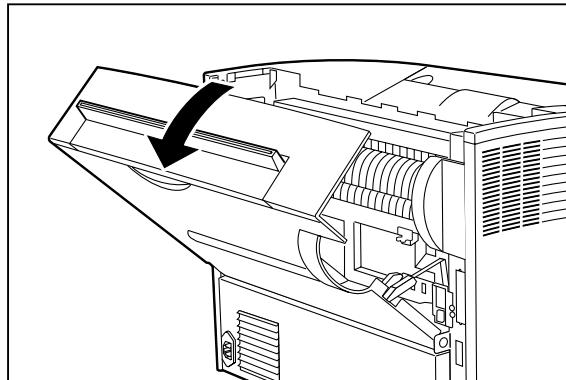
6. Insert the tabs on the offset output tray paper diverter into the matching holes on the right side of the rear cover.
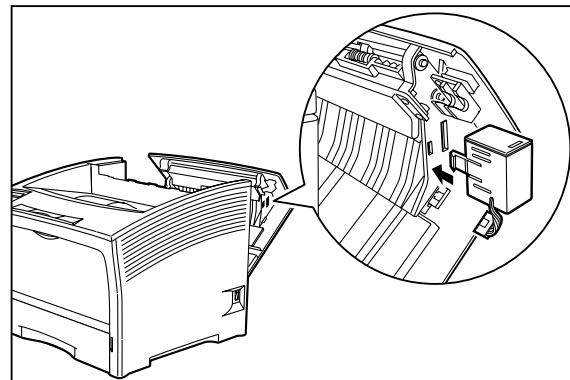
7. Connect the wiring on the offset output tray paper diverter to the rear cover.
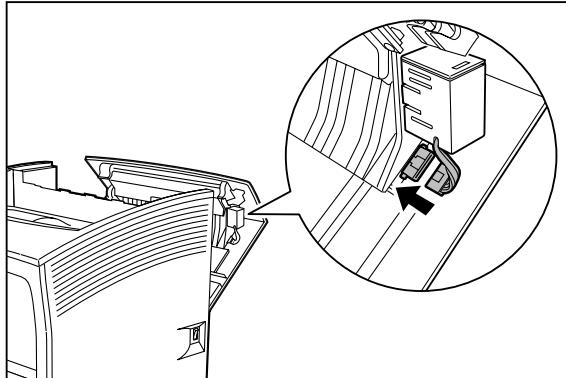
8. Remove the small cover on the left side of the top of the printer.
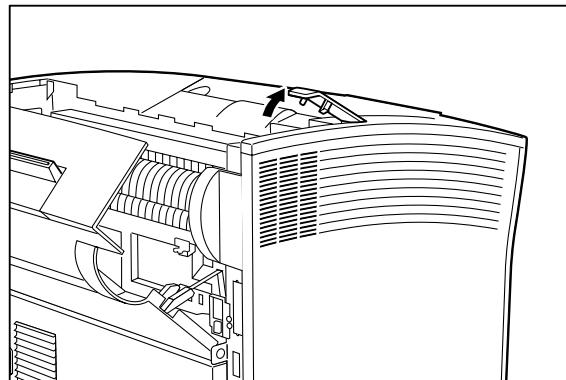
9. Gently lower the offset output tray onto the printer while inserting the metal fittings of the offset output tray into the slots on the printer.
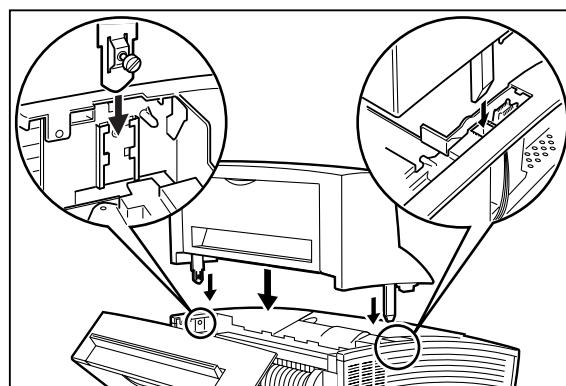
10. Tighten the screw attached to the right metal fitting of the offset output tray.
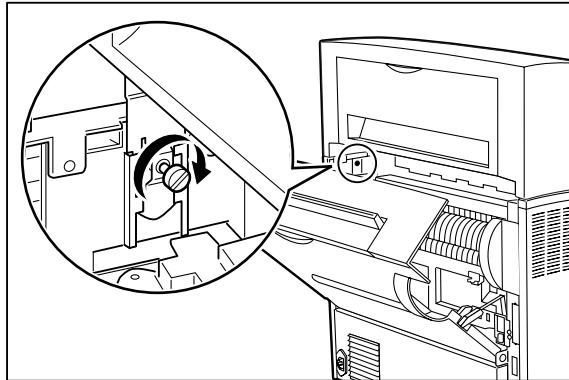
11. Close the rear cover of the printer.
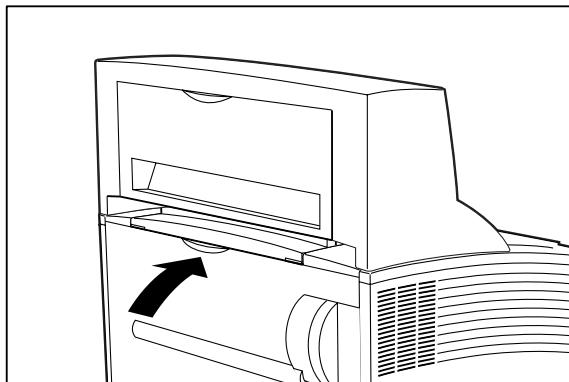
12. Attach the paper output tray to the offset output tray.
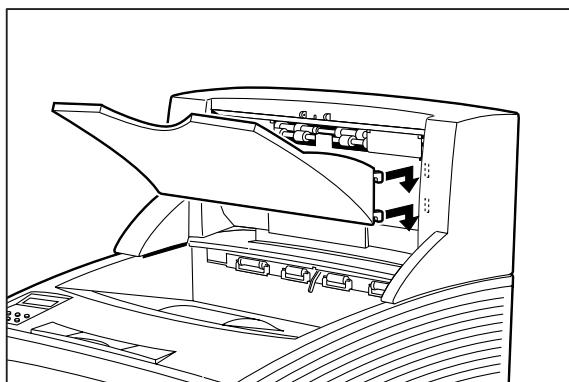
13. Attach the paper guide near the paper exit slot.
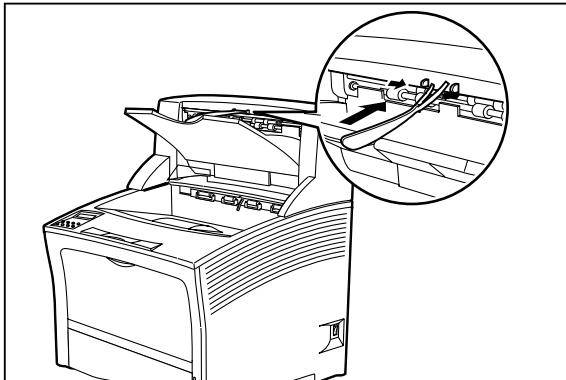
14. Insert the plug of the power cord into the AC outlet and turn the printer on by pressing [I] on the power switch on the right side of the printer.
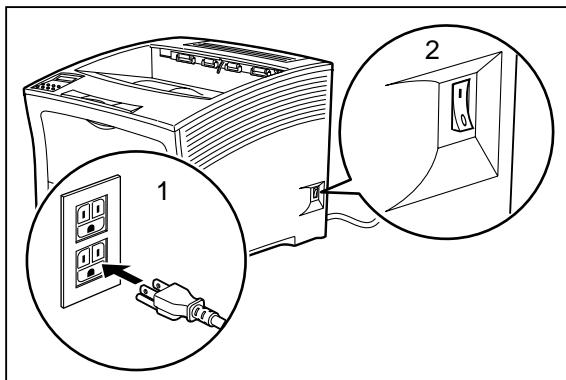
15. Check the display to make sure the printer is ready for printing.

NOTE: If an error message is shown when you turn the printer on, refer to **Chapter 5: Troubleshooting.**i

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Testing the Offset Output Tray

After installing the offset output tray, use the following test procedure to verify that it is operating correctly.

1. Turn the printer on by pressing the [I] on the power switch on the right side of the printer.

2. Once the printer has warmed up and displays the "**Ready**" message on the control panel display, use any software application to print a few sheets to the offset output tray.

3. If the feeder does not feed paper or if the control panel displays an error message, refer to "**Solving Offset Output Tray Problems" on page 9-9**.

Solving Offset Output Tray Problems

When there is a problem with the offset output tray, the printer control panel displays an error code and error message. Most offset output tray error codes indicate routine status conditions such as a paper jam. Some error codes indicate much more serious problems that may require the help of a service technician.

- If the offset output tray is inoperative after installation, refer to "**Installation Problems**" **on page 9-9** and complete the recommended procedure.
- If the printer control panel displays an error message or an error code, refer to "**Interpreting Offset Output Tray Error Messages**" **on page 9-9**.
- If you have an offset output tray problem but the printer control panel does not display an error message or error code, refer to "**Correcting Miscellaneous Offset Output Tray Problems**" **on page 9-11***s* and follow the directions for correcting that problem.

Interpreting Offset Output Tray Error Messages

The printer control panel displays error messages when there is a problem with the printer or any of the optional paper-handling components. The following table lists all of the error messages associated with the offset output tray, the possible cause of the error, and the action to take to correct the problem. If the control panel shows an error message that concerns another part of the printer, refer to **Chapter 5: Troubleshooting** for a complete list of all warning and error messages.

Error or Warning Message Line 1	Error or Warning Message Line 2	Possible Cause	Action
(Warning message, printer continues operating and line 1 shows printer status.)	Offset Tray Full	The offset output tray is full.	Remove paper from the tray.
E8 JAM OFF. TRAY	Remove paper	There is a jam at the offset output tray.	Remove the paper jam. See "Clearing an Offset Output Tray Paper Jam" on page 9-10.
E5 COVER OPEN	Offset Tray	The offset tray is open.	Close the offset tray cover.
OFFSET TRAY FULL	Remove Paper	The offset output tray is full.	Remove paper from the tray.
OFFSET TRAY FAIL	Call Service	The offset tray has failed.	Turn the printer off, then turn it on. If the problem reoccurs, contact an authorized service provider.

Installation Problems

Simple oversights during installation may cause problems when you first use the offset output tray. If the offset output tray is inoperative after you have installed it, use the following procedure to check several possible causes.

1. Turn the printer off by pressing the [O] on the power switch on the right side of the printer.

2. Make sure that the offset output tray is firmly attached to the printer and that the wiring attaching the paper diverter to the printer is intact.

   If the offset output tray is firmly attached and the wiring is intact but the offset output tray is still inoperative, return to the installation procedure and carefully repeat all of the installation steps.

3. If the offset output tray is still inoperative after reinstallation, remove it from the printer so you can run tests on the printer alone.

4. Print a few sheets of paper to the main output tray to make sure the printer is still operational.

   • If the printer is operational when the offset output tray is not attached, contact either your sales representative or a service technician and report your problem.

   • If the printer is not operational when the offset output tray is not attached, refer to **Chapter 5: Troubleshooting** for procedures to correct printer problems. After correcting the printer problem, return to this chapter to reinstall the offset output tray.

Clearing an Offset Output Tray Paper Jam

If an E8 error code precedes the error message on the first line of the control panel display, paper has jammed at the offset output tray. Use the following procedure to clear a paper jam in this location:

1. Pull on the hand grip on the rear of the offset output tray to open the rear cover.
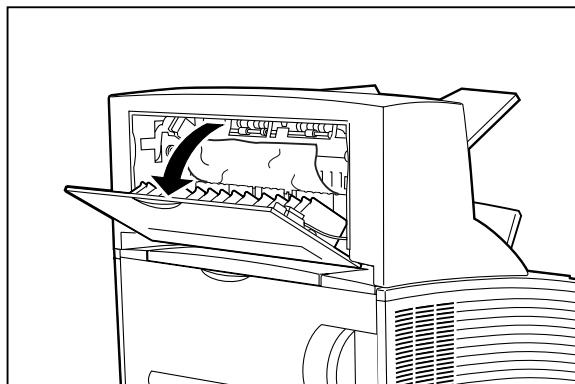
2. Remove any jammed paper from the interior of the offset output tray.
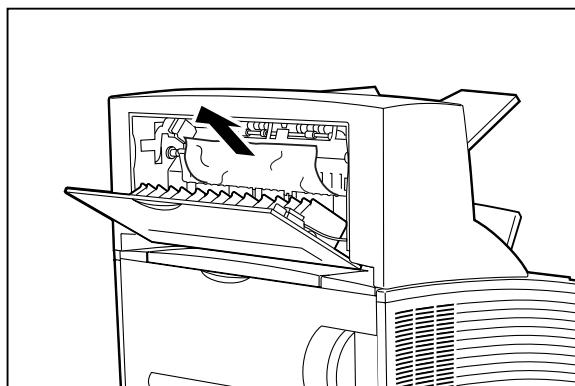
3. Close the rear cover of the offset output tray.
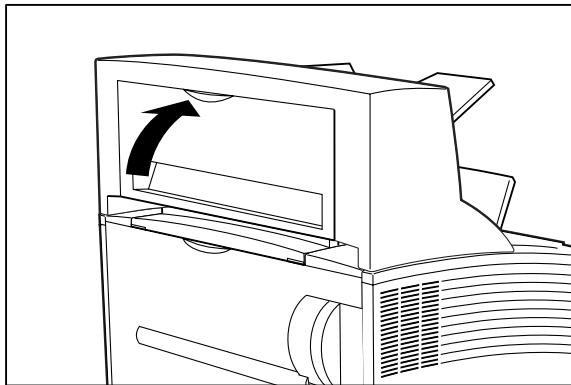
Correcting Miscellaneous Offset Output Tray Problems

Some offset output tray problems may not cause an error message and may not interfere with the operation of the printer. If you are experiencing one of the problems listed below and there is no error message shown on the control panel display, refer to the procedures in the following sections to check the possible causes of the specific problem.

- Inoperative offset output tray
- Erratic operation
- Unusual noise

Inoperative Offset Output Tray

The following characteristics define this feeder problem:

- The offset output tray appears to be inoperative.
- When attempting to print to the offset output tray, the offset output tray does not respond and does not transport paper.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this offset output tray problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Open and then firmly close all of the printer and offset output tray doors and covers.

   Interlock switches monitor the position of printer doors and covers. When a door is closed, the interlock switch is activated and the offset output tray can operate. When a door is open, the interlock switch is not activated and the offset output tray cannot operate. If a door is not firmly closed, the interlock switch may not be fully activated—resulting in an inoperative offset output tray.

2. Examine the printer driver settings to make sure the offset output tray is available as an installed option. If the offset output tray is correctly set as an installed option, reload the printer driver software.

The printer driver software running on the host computer may be damaged. Reinstalling the software is an easy and inexpensive way to isolate or eliminate the problem. Refer to *t*he **DRIVERS** folder on the Electronic Library CD-ROM for detailed instructions on installing the driver.

3. Call your service technician.

   This problem may be caused by a malfunctioning or broken component that requires service.

Offset Output Tray Operates Erratically

The following characteristics define this offset output tray problem:

- The offset output tray does not function correctly.
- The offset output tray does not transport paper, or transports paper without a request.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this offset output tray problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Open and then firmly close all of the printer and offset output tray doors and covers.

   Interlock switches monitor the position of printer doors and covers. When a door is closed, the interlock switch is activated and the offset output tray can operate. When a door is open, the interlock switch is not activated and the offset output tray cannot operate. If a door is not firmly closed, the interlock switch can bounce between being activated and being not activated—confusing the system and causing erratic operation.

2. Reinstall the printer driver software.

   The printer driver software running on the host computer may be damaged. Reinstalling the software is an easy and inexpensive way to isolate or eliminate the problem. Refer to *t*he **DRIVERS** folder on the Electronic Library CD-ROM for detailed instructions on installing the drivers.

3. Call your service technician.

   This problem may be caused by a malfunctioning or broken component that requires service.

Offset Output Tray Makes Unusual Noises

The following characteristics define this offset output tray problem:

- The offset output tray makes unusual noises or makes more noise than usual either while idle or while printing.
- The offset output tray transports paper without a problem.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this offset output tray problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Open the offset output tray cover and inspect the inside for jammed paper or obviously damaged parts.

Broken components or scraps of paper lodged inside the offset output tray may be brushing against moving parts and causing the noise.

2. Call your service technician.

This problem may be caused by a malfunctioning or broken component that requires service.

Offset Output Tray will not Offset

The following characteristics define this offset output tray problem:

- The offset output tray does not offset printed sheets.
- The offset output tray transports paper without a problem.
- The control panel does not display an error code.

The following procedure guides you through multiple actions that may solve this offset output tray problem. Proceed one step at a time until the problem is solved—you may not need to complete the entire procedure. If one of the steps in this procedure corrects the problem but the identical problem returns in less than 50 prints, call for service.

1. Open the offset output tray cover and inspect the inside for jammed paper or obviously damaged parts.

Broken components or scraps of paper lodged inside the offset output tray may be wedged against moving parts, preventing the offset roll from moving.

2. Call your service technician.

This problem may be caused by a malfunctioning or broken component that requires service.

Maintaining the Offset Output Tray

The offset output tray requires very little maintenance; however, with normal use you will need to perform some routine maintenance tasks such as cleaning.

Cleaning the Exterior of the Offset Output Tray

Through normal use the exterior of the offset output tray may become dirty or stained with toner. Although exterior dirt should not affect printer performance, an occasional exterior cleaning may be necessary to maintain the appearance of the offset output tray.

1. Turn the printer off by pressing [O] on the power switch on the right side of the printer.
2. Remove the plug of the AC power cord from the AC wall outlet.
3. Using a soft cloth, slightly damp with cold water, wipe the offset output tray covers and tray faces. Use a very mild, non-abrasive soap to remove heavy dirt and toner stains.

CAUTION: Do not use solvents or abrasive cleaners to clean offset output tray covers. Use only cold water and a very mild soap to clean covers.

4. Using a soft, dry cloth, thoroughly dry the covers and tray faces.
5. Insert the plug of the AC power cord into the AC wall outlet, and turn the printer on by pressing [I] on the power switch on the right side of the printer.

Moving the Offset Output Tray

Moving the Offset Output Tray a Short Distance

Use the following procedure to move the offset output tray a short distance:

1. Turn the printer off by pressing the [O] on the power switch on the right side of the printer.
2. Disconnect the plug of the AC power cord from the AC wall outlet.
3. Disconnect the printer from the host computer.
4. Wait 30 minutes for the printer to cool before moving the printer.
5. Remove the toner cartridge and cover it with an opaque plastic sheet.
6. With the help of another person, grasp the recessed areas on the bottom of the printer and lift the printer. Carefully carry the printer to the new location.
7. Once the printer and offset output tray are in the new location, refer to the printer **Installation Guide** included in the original packaging to reinstall the printer.

Moving the Offset Output Tray a Long Distance

1. Turn the printer off by pressing the [O] on the power switch on the right side of the printer.
2. Disconnect the plug of the AC power cord from the AC wall outlet, and disconnect the AC power cord from the printer.
3. Disconnect the printer from the host computer.

4. Remove the paper diverter from the offset output tray.

5. Remove the offset output tray cover from the top rear of the printer and replace it with the original printer cover.

6. Remove the output paper tray from the offset output tray.

7. Remove the paper guide from the offset output tray.

8. Unscrew the thumbscrew on the right metal fitting of the offset output tray.

9. Carefully lift the offset output tray off of the printer.

10. Repack the offset output tray components in the original packaging.

11. Once the offset output tray is in the new location, refer to **"Installing the Offset Output Tray" on page 9-3.**

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Safety Notes and Regulatory Compliance

In this Chapter . . .

About this Appendix

This appendix lists important safety precautions and identifies the applicable regulatory compliances of your printer.

Safety Notes

- Be sure to switch off and unplug the printer before accessing the interior of the printer for cleaning, maintenance, or fault clearance. Accessing the interior of a live machine exposes you to the risk of electric shock.

- Do not place the printer in a hot, humid, dusty, or poorly ventilated environment. Prolonged exposure to these adverse conditions may cause fire or expose you to electric shock.

- The printer is capable of operating normally within the following environmental limits:
  - Temperature range: XX°F -95°F (5°C -35°C)
    At high temperatures (95°F /35°C), humidity should be at or below 70%.
  - Humidity range: 15%-85% (no condensation)
    At maximum humidity (85%), temperature should be at or below 82°F(28°C).

- Stop operation immediately if your printer produces smoke, excessive heat, unusual noise, or smell. These conditions can indicate or result in a fire. Immediately switch off and unplug the printer, and contact your point of purchase.

- The fuser becomes very hot in normal operation. If a paper jam has occurred, turn the power off and wait at least 10 minutes before removing the drum cartridge and touching the fuser section.

Regulatory Compliance

Safety Compliance

This product conforms the following safety standards:

- UL1950
- CSA C22.2 No. 950
- EN 60950
- IEC 950
- 73/23/EEC

Class 1 Laser Device and CDRH Compliance

This printer is certified as a Class 1 laser product under the U.S. Department of Health and Human Services (DHHS) Radiation Performance Standard according to the Radiation Control for Health and Safety Act of 1968. This certification indicates that the printer does not emit hazardous laser radiation. Since radiation emitted inside the printer is completely confined within the protective housings and external covers, the laser beam cannot escape from the machine during any phase of user operation.

The Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration implemented regulations for laser products on August 1976. These regulations apply to laser products marketed in the United States. The label on the printer indicates compliance with the CDRH regulations and must be attached to laser products marketed in the United States.

EMC Compliance

Class B Equipment

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment generates, uses, and can radiate radio frequency energy. If the equipment is not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, try to correct the interference using one or more of the following measures:

■ Reorient or relocate the receiving antenna.

■ Increase the separation between the equipment and receiver.

■ Connect the equipment and the reciever to outlets that are on different circuits.

■ Consult with the dealer or an experienced radio/television technician to help.

■ Always use the power cord provided with your machine. When an extension cord is required, always use a properly rated cord.

■ In countries other than the United States, please contact your point of purchase.

If your machine is a 220-240V model, there is no need to attach a separate earth line since the earth connection is incorporated in the power line. Plug it into a properly rated outlet.

The use of a non-shielded interface cable with the reference devices is prohibited. Shielded interface cables must not exceed the following limitations:

■ The length of the IEEE 1284 parallel interface cable must be 50 feet (15 meters) or less.

■ The length of the Ethernet interface cable must be 328 feet (100 meters) or less for type 10/100BASE-T or 185 meters (607 feet) or less for type 10/BASE-2.

■ The length of the power cord must be 10 feet (3 meters) or less.

Other EMC Standards

This product also conforms to the following EMC standards:

■ CNS 13438

■ VCCI V-3/97.04

■ AS/NZS 3548:1995 including A1:1997 and A2:1997

■ EN55022: 1994 including A1:1995 and A2:1997

■ FCC Part 15, Subpart B (CFR 47, 1995)

■ CISPR22: 1993 including A1:1995 and A2:1996

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